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Relation of Harvard University to Schools of Secondary Education

Second Report of Committee
of Associated Harvard Clubs

At Chicago, May, 1906

Regards of

Mervin Starr

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Merritt Starn

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Report of the Committee of the Associated Harvard
Clubs for the year 1905-1906, on the Relation
of Harvard University to Schools for
Secondary Education.

To the Members of the Associated Harvard Clubs,
MR. GEORGE D. MARKHAM, '81, *President.*

GENTLEMEN :

At the last session a resolution was adopted continuing the present Committee in service, and authorizing them to conduct further inquiries upon the subject indicated above.

Pursuant to that direction your Committee have corresponded with schools for secondary education by means of the circular letter, a copy of which is attached hereto as Appendix I, and the responses of the schools thereto. This circular was sent out to 200 schools, and responses were made by over 40 schools. We have endeavored to summarize their responses in the appendix. The report is necessarily incomplete. Some schools have not been reached, and many have failed to reply.

To the officers of Harvard and other universities who have answered our letters of inquiry, and to the teachers of the secondary schools who have responded so gener-

ously, filling out our blank tables with statistics, setting out their views on the questions submitted, and making recommendations for improvement, we beg to return our hearty thanks. In the tabulation of the statistics many uncertainties and variables necessarily occur; and we shall be surprised if misinterpretations and inaccuracies are not discovered and shall appreciate any corrections that may be made. Many most interesting suggestions were received which lack of space prevents incorporating in full. We recommend that all these responses be turned over to the university authorities as permanent records, and for such use as they may deem expedient.

It will be observed that the first five of the inquiries relate to the character, quality and size of the school, to what extent its graduates go to college, to Harvard, and to professional life; questions 6 to 11 specifically inquire as to methods of securing closer relations—as to Harvard entrance requirements and whether any difficulties are found therein, and as to the relations of the secondary school to the schools below it; questions 12 to 14 relate specifically to the subjects of school inspection and admission by certificate.

The answers to these circulars show that far too little attention has been paid by the schools, both private and public, to the future records of their graduates. From more than one avenue has come the suggestion that such statistics are wanting at present, but that the inquiry for them will itself tend to promote the keeping of such records.

In the tabular list of schools from which students came to Harvard for the ten years, 1895-1904 (President Eliot's report for 1905, pp. 35-370, quoted in our last

report) there were in all 631 schools listed. These 631 may be classified and summarized as follows:*

Public High Schools.....	235
Public Normal Schools.....	8
American Colleges (other than Harvard)...	72
American Universities (other than Harvard)	65
Private Institutions named as—	
“Schools”	135
“Academies”	66
“Institutes”	16
“Latin Schools”.....	7
“Seminaries”	7
	— 231
Foreign Schools, Colleges and Gymnasias	20
	— 631

In the ten years reported on, certain well known universities sent men to Harvard College as undergraduates as follows:

The University of Kansas,	16 men
The University of Chicago,	13 men
Cornell University,	6 men
Acadia College,	13 men
The University of Michigan,	11 men
The University of New Brunswick,	11 men
Tulane University,	11 men
University of Minnesota,	9 men
Bates College,	7 men
Colby University,	7 men
Boston University,	6 men
Amherst College,	11 men
Earlham College,	6 men
Other Colleges and Universities,	334 men

Total undergraduates entering Harvard
from other colleges and universities, 461 men

*The foregoing is exclusive of the headings “Private Pupils”, “Self Prepared Pupils”, “Harvard College Special Students” and “Harvard Graduate Students.”

Necessarily there is room for error in such classification, How, for

These colleges, universities, normal schools and foreign schools are among the most valuable contributors to Harvard's population, sending usually men who seek education in the best institution; and the contribution from American colleges generally shows the wholesome stimulus which Harvard exerts upon them; but they are not, strictly speaking, "secondary schools," and should be excluded here;—leaving 466 secondary schools tributary to Harvard. Of these 235 (or, including Massachusetts "Latin schools," etc., as counted by President Eliot, for 1896-1905, 253) are public schools. A rough count shows that in the 10 years the 235 known public schools and 4 Massachusetts Latin schools sent over 2,000 pupils, while the private institutions in all sent less than 1,700 pupils. A corrected count from President Eliot's 253 public schools would increase the majority; and, as we shall see, the scholarly honors are with them, also.

These facts show the real democracy of Harvard. Again, the public school is the prevailing type of fitting school in the West; and, as hereinafter shown, the recent increase in Harvard's public school quota is from outside New England. These facts also show that the public schools are the tributaries with which better relations may wisely and properly be sought.

Last year we recommended that greater publicity be given (1) to the wide range, variety and flexibility of Harvard's requirements, (2) to the installment plan of examinations, (3) an increase in the number of distant examinations, (4) the consideration of a system of prize scholarships for successful candidates at distant examinations, and (5) the inspection of secondary schools.

example, shall "Columbia Institute", be classified? President Eliot, *infra*, quotes the number of Public High Schools as 253, thereby increasing the total by 18 institutions, for 1896-1905,

On March 1, 1906, the University promulgated rules (a) authorizing the substitution of the examinations of the College Entrance Examination Board* for those of the University; and, (b) liberally extending the installment plan of examinations, so that now a boy can take his examinations in installments, varying in amount from a semester's work in a single study, to a year's work or the entire preparatory course.

For acknowledgment of President Eliot's influence in reference to the Entrance Board, see App. II, p. 9, *infra*.

The bugbear of a single examination on the entire work of two, four or more years, with the inevitable cramming process leading up to it, is no longer a compulsory feature of admission to Harvard.

The significant announcement is as follows:

“A candidate for admission to Harvard College who wishes to substitute examinations of the College Entrance Examination Board for the regular Harvard admission examinations may make in 1906 such substitutions as are indicated below (with a detailed list of studies appended):

* * * * *

“CHANGES IN RULES GOVERNING ADMISSION.

“Hereafter, candidates who at any time before their preparation is complete wish to take examinations in subjects in which they are ready for examination may, with the approval of their school, offer themselves either in June or September for examination in any subject or subjects in which they present a *certificate of preparation*. Consequently, the old rules, (1) that candidates may not divide their examinations except between two years, and (2) that candidates failing in June may not be re-examined in September in the same subjects, are abolished.

*The College Entrance Examination Board is a body consisting of representatives of 28 colleges and universities (including Harvard) and seven representatives of secondary schools.

Secretary: Thomas S. Fiske, Ph. D. P. O. Sub-Station 84, N. Y.

“Hereafter, preliminary candidates who have received certificates of preparation from their schools will be credited with any subject or subjects in which they pass. The old rule, which fixed a minimum number of points for which credit was given at a preliminary examination (eight for Harvard College, and six for the Scientific School), is abolished.

“These changes have been made in the interest of greater freedom, both for schools and for students, and to prevent overcrowding school programmes, especially in the last two years, with subjects already sufficiently studied, which students are obliged to carry for examination purposes only. The Committee hope that as a result of changes which allow candidates to take examinations when they are prepared, and to retain credit for whatever they actually accomplish, students will be able to make greater progress, either in the fields of study in which they have already been examined, or in other fields, and to do work of better quality.” (*Announcement of the Committee on Admission, March 1, 1906.*)

Relative to point 3 above, recommending the extension of examinations to distant points, and to the whole subject of the relations of the University to secondary schools, we are advised by Secretary J. G. Hart, under date of March 19, 1906, as follows:

“You will be glad to hear that we have been doing many things here in Cambridge this year, which will have the effect, I think, of making closer relations between the University and secondary schools. Up to this year, admission to the University was in the hands of five different Committees, which often worked at cross purposes, and caused misunderstandings between schools and the University. These five Committees have been superseded by one; and that Committee is hard at work revising the whole system of admission. Already it has brought about the acceptance of Board Examinations as substitutes for Harvard examinations, and has thereby extended the influence of the University over a much wider

territory. The examinations for admission to Harvard will be held this June in about *one hundred and fifty* places, as against the *forty* places in which they were held last June. The Committee has also brought about changes in the rules governing admission, which have removed some of the most frequent causes of complaint made by schools about the workings of admission requirements."

These signs of advancement are certainly encouraging, and give the Associated Harvard Clubs ground for belief that the closer relations which they have recommended are dear to the University, and will be the objects of its constant care.

(4) On the subject of scholarships for successful candidates at distant examinations it may be observed that the Catalogue for 1905-6, page 546, recites:

"These scholarships are restricted, with a few exceptions, to resident students," and (p. 579):

"The income of the Price-Greenleaf Fund is distributed in sums of from \$100 to \$250 a year: *First*, to undergraduates in the first year of their residence (whether freshmen or students admitted to advanced standing, with or without examination);

* * *

"Price-Greenleaf Aid can be given only to undergraduates of Harvard College.

"The regular assignment to first-year students is made *before or at the time of* their entrance. To hope for a share in this assignment the applicant must be strongly recommended by the college, academy or school with which he has been connected;

* * *

"In every case the amount assigned is payable (but only to persons who may be undergraduates at the time of payment) in two installments, at the time of presentation of each of the two term-bills of the year."

Dean Hurlbut writes:

"The first assignment (of Price-Greenleaf Aid)

is made in June to men who propose to be freshmen the following September; that is, it may be given before the candidate has taken any of his examinations for Harvard.” (Letter of February 10, 1905.)

It would therefore appear that it is feasible for the University to use some of its scholarship funds to attract the best scholars from distant secondary schools.

There will always be the question, “Is it better to attract the best scholars from distant schools, or to retain those from near-by, well known schools?” It is to be regretted that any such comparison of local interests should even seem to be necessary; and it is to be hoped that in time the University will have sufficient resources to be able to attract and retain them both.

In connection with this subject it is to be observed that some of the State universities have now, for several years, been offering free scholarships as prizes to candidates for admission from the public schools of their respective States, under restrictions deemed suitable by the authorities of those universities for securing the best results at the examinations.

In response to inquiry, Dr. W. W. Pillsbury, Registrar of the University of Illinois, writes:

“For some years prior to 1905, the Board of Trustees of the University of Illinois had offered a scholarship to each county, the scholarship to be won at a competitive examination, which covered in full the entrance requirements. For a few years prior to that date, the University had allowed on similar terms a scholarship to accredited schools. These were good for four years, and a second scholarship was not awarded until the end of the four years, unless a vacancy occurred earlier.

In 1895 the General Assembly (Session Laws Illinois, 1895, page 324) passed a law with regard

to scholarships, and the scholarships named above were no longer offered.

In 1899 the Trustees offered a scholarship in agriculture to each county in the state, except Cook and Lake, and one to each of the first ten congressional districts.

In 1900 this offer was duplicated for young women who wished to pursue a course in household science.

The record of persons who have attended the University during the years 1896-7 to 1905-6 on these scholarships is as follows:

SCHOLARSHIPS IN UNIVERSITY OF ILLINOIS.

YEAR.	STATE.	AGRICUL- TURAL.	HOUSEHOLD SCIENCE.
1896-7	11	—	—
1897-8	30	—	—
1898-9	54	—	—
1899-1900	70	70	—
1900-1	91	131	—
1901-2	128	166	19
1902-3	163	178	28
1903-4	230	190	30
1904-5	280	187	55
1905-6	308	188	62

As you are, I presume, aware, the General Assembly at the session of 1905 (Session Laws Illinois, 1905, page 360) passed a law by which the law of 1895 was repealed, and providing that one scholarship should be given by the University to each county, and that each member of the General Assembly might nominate one candidate for a scholarship.

Also the University has just offered scholarships, one to each county, in ceramics.

In order to advertise these scholarships, the University has issued circulars, which it has sent out to the county superintendents and to the principals of the high schools.

The State scholarships too have been noticed from time to time in many of the papers.

The agricultural scholarships have been advertised quite generally by the Illinois State Farmers' Institute and by the local county institutes.

The scholarships for household science have been advertised through the Illinois State Farmers' Institute and through the domestic science associations. County superintendents and high school principals have also been supplied with circulars with regard to both the agricultural and household science scholarships, and they have been noticed more or less in the agricultural papers of the state.

The ceramics scholarship has been also advertised quite extensively through all the clay-working associations of the state, and especially at their annual meeting held here a short time ago. These circulars have also been sent to the county superintendents.

Doubtless these scholarships have had some effect in increasing the attendance at the University, not so much, however, as one might anticipate from the number of them. The reason for this doubtless is that the scholarship in each case amounts simply to a remission of certain fees; namely, the matriculation fee of \$10 and the incidental fees of \$12 each half year, a total for a four years' course being \$106. Since the fees are so small at the University as compared with the fees at colleges and universities not maintained by the State, the scholarships have not a very large money value. Perhaps they have had more to do with bringing us students in the agricultural department than in any other department of the University.

No attempt has been made to compare carefully the records of scholarship students with the records of students not holding scholarships. I did, however, find upon investigating the record of one or two classes that the continuance in attendance was much better on the part of scholarship students than of those who were paying fees. This doubtless was due to the fact that a consid-

erable number of the scholarship students are young men who have found it necessary to earn a considerable part of their expenses, and who, consequently, appreciate more highly the help which the scholarship gives them than do those with whom funds are abundant.

I should expect, upon looking into the matter of scholarships, that the average standing of scholarship students is higher than those who do not hold scholarships."

The University of Illinois is taken as a convenient example of the quite general practice of State universities. The State university gives an education at nominal cost, and then, to superior scholars, it remits even the nominal cost. The awarding of the scholarship may be, and frequently is, more significant as a mark of distinction than as a pecuniary aid; and may frequently serve as the initial attraction and stimulus to a higher education unto some who would not otherwise have gained such education, and yet who, when drawn to the university, have developed elements of superior quality and value. The matter is referred to here simply to indicate its recent growth into an important factor affecting the destination of the university-going population. The State universities are determined to obtain a large and increasing proportion of the graduates of the public high schools, and have superior correlation to them and opportunities for reaching them; and as President Eliot states in his report for 1902-3, pp. 14, 15, the statistics, in reference to admission examinations, and to distinctions in college work which he there arrays, "tend to prove that the product of the public school has more character and power of work than the product of the other schools"; and, "the candidates who come from public high schools were decidedly the most successful at the admission

examinations''; and (as to graduation at Harvard with distinction), ''again the honors belong to the public schools.''

The state universities have better opportunities for obtaining these students who have more character and power of work.

If Harvard is to continue to assemble the best scholars from these public schools to which the state universities have vital and much closer relations, she may well consider means of improving her own relations with them.

Referring to the total list of schools contributing pupils to Harvard College, President Eliot in his report for 1904-5, page 32, says:

''The number of public schools which from time to time send some of their pupils to Harvard College is increasing.

In the ten years, 1876-1885, there were 82 such schools.

In the ten years, 1881-1890, there were 96 such schools.

In the ten years, 1886-1895, there were 132 such schools.

In the ten years, 1891-1900, there were 163 such schools.

In the ten years, 1896-1905, there were 253 such schools.

In 1895, 55 public schools (of which 36 were Massachusetts High or Latin schools) sent pupils to the College; in 1900, 84 public schools (of which 46 were Massachusetts High or Latin schools) sent pupils to the College, and of the other 38 public schools, nine were in New England, and twenty-nine outside of New England; in 1905, 71 public schools (of which 38 were Massachusetts High or Latin schools) sent pupils to the College, and of the other 33 public schools, five were in New England, and 28 outside of New England. Ten years ago there were only 13 such schools outside New England. These figures show

that the connection of Harvard College proper with *Massachusetts* High Schools and other *New England* High Schools is *not as good* today as it was five years ago."

And they also show that the connection of Harvard with High Schools *outside* New England is *better* than it was ten years ago; and that with this favorable disposition in the High Schools of the rest of the country there is a great opportunity for further development in this respect.

The attendance at Harvard has fluctuated notably in recent years. In explaining such fluctuations, among the factors which must be taken into account are the increasing facilities and attractions of the State universities. The State universities do indeed appeal in some ways to a different constituency, and do employ some factors (*e. g.*, household science) which are not to be thought of at Harvard; but in their visitations of the public schools, and in the inducements which State universities rightly employ to secure the best scholars from the secondary schools, it may be that they have furnished an example which Harvard may consider with profit.

(5) The system of inspection and admission by certificate.

The report of the United States Commissioner of Education for 1902, devotes Chapter XII (pp. 527-539) to a discussion of this subject. It assembles statistics which show that at that time there were 339 colleges and universities in the United States which admitted students to the freshman class upon certificates from accredited preparatory or secondary schools. "In some of the institutions included in this list," says the Commissioner, "an examination is required in some particular subject or subjects, as, for instance, in Cornell University, an

examination is required in English.” Of the 339 institutions there summarized, the New England and North Atlantic States contain institutions employing this system as follows:

Maine	3	New York	21
New Hampshire	2	New Jersey	2
Vermont	3	Pennsylvania	21
Massachusetts	10	Delaware	1
Rhode Island	2	Maryland	5
Connecticut	3	District of Columbia...	3
<hr/>			
76			

Among these are such institutions as Bates and Colby, Dartmouth, Amherst, Williams, Brown, Trinity, Hamilton, Hobart, Cornell, Rutgers, Lehigh, Lafayette, the University of Pennsylvania, Delaware, Johns Hopkins and Columbia University.

A few points in the history of the system may be taken from the address of Professor A. S. Whitney, of the University of Michigan, delivered at the annual meeting for 1902 of the Association of Colleges and Preparatory Schools of the Middle States and Maryland, at Baltimore, Md., and printed in the *School Review* for February, 1903.

Professor Whitney (describing the work at Michigan) says:

“In the early beginnings of the accrediting system, (1872), a committee of the faculty, upon special invitation of superintendents and boards of education, annually visited the high schools and examined their courses of study, methods of instruction, scholarship of teachers and pupils, library and laboratory facilities, and prevailing intellectual and moral conditions. In addition, schedules of test questions, previously prepared for use of visiting committees, were assigned the various classes and their written

answers submitted as confirmatory evidence of the character of the work accomplished. These findings were reported to the faculty, and upon their character was determined the future relationship between each individual high school and the university.

* * * * *

“This system prevailed until three years ago (1899), when stress of numbers, inadaptability of certain members of the faculty to do the work of inspection, and a desire for greater uniformity of standards and methods necessitated a change. Following the example of several of her sister institutions, the University of Michigan appointed a *special official* to take sole charge of inspection and to report his findings to a so-called diploma school-committee, composed of heads of departments, with the president of the university as chairman. This plan of inspection now obtains, in some form or other, in connection with all the great universities of the Northwest, except the universities of Minnesota and Indiana. The smaller institutions generally accept the standards set by the great universities of their respective States. (Minnesota uses the system with modifications, see App. II, p. 1.)

“The inspector visits the schools without previous notification. He learns the population of the city, the total enrollment of the schools, the enrollment in the high school, and the number of teachers employed, both in the grades and in the high school. He acquaints himself with the teachers of the high school, inquires concerning their academic and professional preparation, the subjects they teach, and the number and average length of their daily class periods. He visits the class rooms, analyzes the work of the teachers, and endeavors to determine the efficiency of each by noting his aim and plan of lesson, his mastery of the subject, his skill in adapting the lesson to the needs and capacities of his pupils, his ability to analyze and classify difficulties, his power to attract and hold attention, his skill in the art of questioning, his assignment of the lesson;

he also notes the manner in which the pupils have attacked the lesson, their habits of thought and study and the general spirit and progress of the class. He examines the course of study, the text-books used, the library and laboratory facilities; he takes note of the plan of organization, the character and methods of discipline, and the intellectual and moral tone of the school; and he ascertains the average size of the graduating classes, the number of graduates attending higher institutes of learning, the number now preparing for such education, the attitude of the patrons and the community toward the school and toward educational affairs generally. Finally, he examines the structure, capacity, heating, lighting and ventilating of school buildings.

* * * * *

As to admission by certificate he says:

“At least four conditions must be fulfilled before an applicant can receive recognition at the hands of the university:

“1. The applicant must have received his preparatory training in an accredited high school.

“2. The applicant must be a graduate of an accredited high school. The university sets the stamp of its disapproval upon non-high school graduates and will give them no recognition (by the accrediting system) whatever. Only the finished high school product receives consideration.

“3. The applicant must present a regulation certificate, furnished by the university and properly filled and signed by the superintendent or principal of high school; this certificate states that he has completed all the work required for entrance to the university and specifies the branches pursued, number of weeks and of recitations per week devoted to each, text-books used, and the teacher's estimate of his scholarship in the several branches.

“4. The applicant must furnish a recommendation from the superintendent, high school principal, or faculty attesting their belief in his ability to pursue university work with pleasure and profit to himself and credit to the university.

* * * * *

“It should be observed that after the first semi-annual examination of the freshman year the records of scholarship attained by the students thus recommended are reported back to their respective high schools, and the credit or discredit, after making due allowances for changed conditions, is charged accordingly. So deeply is the responsibility felt by high school authorities that they are wont to exaggerate on the side of conservatism. This is not only the testimony of superintendents and principals themselves, but it is demonstrated by the fact that every year numbers of students who have been refused recommendations by the accredited schools present themselves and enter the university by way of the examination door. This requirement has led not a few high school authorities to grade the diplomas granted to the graduating classes as ‘A’ and ‘B,’ the former entitling the holder to certificates of admission to the university and the latter withholding such privilege.

* * * *

“As to scholarship, little better can be done than to summarize a report made by a committee of the faculty appointed to investigate the standings of students admitted on certificate as compared with those admitted on examination for the first nine years of the existence of the accrediting system. This committee made a careful study of the examination records of all the members of the freshman classes for the period named, and tabulated the results in such manner as to show separately the standings of those admitted on certificate and those admitted on examination—a study involving more than 1,000 students and more than 10,000 examinations. The committee refrained from examining the records subsequent to the freshman year, in the belief that one year in the university ought to obliterate the main distinctions arising from differences in preparatory schools. From the tables thus framed and classified the committee computed the percentages of scholarships from each class by dividing the number of examinations successfully

passed by the number that, by order of the faculty, ought to have been passed. The following are the results obtained:

Total number of students admitted on certificate	470
The percentage of scholarship.....	88.91
The total number of students admitted on examination	574
The percentage of scholarship.....	87.22

“It will be observed that the committee found a slight balance in favor of admission by certificate, showing that the university was the gainer, rather than the loser, by the change.

* * * * *

“1. *Its Influence Upon Standards.*—Before a school can be accredited *it must offer all the branches required at the university for admission*; it must pursue them for certain periods of time, the minimum of which is specified; it must give suitable opportunities for library and laboratory work, and it must attain a certain fixed degree of thoroughness, vitality, and spirit of scholarship. The inspector comes, backed by all the authority and influence of a great university, examines these standards according to his definitely fixed ideals, and reports back to the proper authorities. Upon this report hang in a large measure the reputation, the influence, and the prestige of the school, and therefore a favorable outcome is highly prized. Inspectors are frequently requested by superintendents to examine their schools unofficially for the sole purpose of *aiding them in marking and bettering their standards.*

“2. *Its Influence Upon the Teaching Force.*—After the inspector has examined a high school, as heretofore outlined, comes the conference. Here he explains to the superintendent or principal the conditions as he sees them, commending the good and pointing out the bad. He explains the theories of the university, changes in requirements for admission, and plans in operation in the best high schools, and he suggests ways and means for correcting defi-

ciencies and laying solid foundations for scholarship. He advises also concerning the organization, the methods of discipline, the courses of study, library and laboratory facilities, text-books, and supplies. The inspector listens in turn to a statement of their difficulties, fears, hopes, and ambitions, and aids to the best of his ability in their proper solution. He meets the teachers if need be and gives them opportunity to ask for his criticisms, suggestions, and help, an opportunity of which they freely avail themselves. If the standards of the school are only moderately satisfactory or are too low to warrant establishment of accredited relationship, it is placed on the '*nursing list*' and re-examined the following year. If conducted frankly and sympathetically the conference hour can be made productive of immeasurable benefit.

"3. *Its Influence Upon Pupils.*—The influence of the accrediting system upon pupils has already been indicated. There needs to be added, however, that the opening of the university door to all properly accredited students is not the only potent influence at work among them. The repeated visits of the university inspector are of scarcely less importance. They arouse among the pupils of the average high school a *spirit of inquiry concerning colleges and universities*; they set them to thinking and to *talking about going to college*, they intensify their desires and stimulate their ambitions to make the trial.

* * * * *

"4. *Its influence Upon the Boards of Education and the Communities.*—The boards of education and the communities always desire the highest possible efficiency of their schools, and they have come to measure this efficiency by the recognition the schools receive at the hands of the university. They therefore cordially invite the university inspector, earnestly seek his opinions and advice, and give serious consideration to all his recommendations."

* * * * *

“President Angell in his annual report for 1882 says:

“ ‘This innovation on old customs, like all innovations, and chiefly because it was an innovation, was met at once with severe criticisms, and especially by some distinguished educators in the older colleges, fearing, as was alleged, that such a system would bring down the standards of colleges. Experience, however, has proved that there was no ground for fear, except that the thing was new and not practiced in the mother colleges. Two facts are to be noted among the results: (1) The standard of preparation in the high schools, if affected at all, has been *elevated rather than lowered*; (2) *the State system of education* has become a reality. It is obvious that there can be no system, properly so called, without an *actual and living connection and communication among its members*. By calling for the visiting or examining committee of the faculty the high schools have been brought into that vital connection with the university which makes them parts of a natural organism and, so far as concerns our schools, our State system no longer exists merely on paper.

“ ‘No one can look into the condition of these schools without feeling satisfied that this connection has had the effect both to *animate their students and to encourage and strengthen the teachers*, while it has brought about a more *perfect unity of plan and method in the schools of the State* in general. In short, it gives to our *schools, otherwise isolated, a bond of union and a center of life*. We are convinced, as the result of an experiment of ten years, that this co-operation plan, especially if entered into by the few remaining schools, and thus perfected, will give a character of consistency, solidity, strength, and efficiency to the educational work of the State, which will leave nothing further to be desired but the uninterrupted operation and movement of the system.’ ”

Prof. Whitney adds:

“At that time there were 16 schools upon the accredited list; to-day (1902) the number has swelled to 250. In a recent interview President Angell, in the light of the twenty years that have passed since that report was written, emphatically confirms the position there taken.”

Professor E. G. Dexter, of the Chair of Education at the University of Illinois (to whom we are indebted for the bibliographic list) says (National Conference on Secondary Education and Its Problems, N. W. U., 1904, pp. 96-97):

“In 1895 a regular high school visitor was first appointed (by the University of Illinois for the high schools of Illinois), the examination of schools having been up to that time carried on by means of occasional visits by various members of the University faculty. For the years since that time the number of schools upon the accredited list is as follows:

1896..135	1898..163	1900..193	1902..231
1897..150	1899..179	1901..208	1903..250

From Leland Stanford Junior University Registrar Elliott sends us a letter strongly commending the system of accredited schools maintained by the State University of California, and adds:

“At present, however, the requirements of the two universities are so nearly in accord that we accept California’s accrediting without question. I may say that the system developed by the State University for California schools seems to me more efficient than any I am acquainted with. The relations between the fitting schools and the university are very close and have been mutually helpful and satisfactory. There has naturally been some complaint of arbitrary action on the part of the examiners, but I have found in general that high

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school principals regard the relation as beneficial and stimulating to the best interests of the school."

It is worthy of notice that Leland Stanford should thus accept the accrediting of its near neighbor and chief rival without question.

Registrar Elliott (of Stanford) sends additional papers for use by schools outside of the State of California. Among others the blank form to be filled up by the principal, in which, after 24 general questions, the principal is required to tabulate the entire work of the pupil in the secondary school from beginning to end, stating for each study pursued the number of weeks during which it was pursued, the number of periods per week, the length of the periods, a description of the studies, of the text books and the amount covered, of the authors read and the pages in each, of the supplemental work done in addition to the text book, the date of completing the work and the grade attained, together with the specific recommendation or denial of recommendation *as to each particular study separately*, concluding with forms for comments, remarks, opinion and certificate by the principal, the whole being accompanied by a warning that the same is confidential and should not be made out by nor shown to the pupil, and the further warning that recommendations from schools whose pupils prove unsatisfactory, either because of inadequate preparation, or from want of seriousness of purpose, will ultimately not be considered.

From the University of Chicago, Examiner F. J. Miller writes:

"The number of schools examined by the University is 326, the number approved is 238, with 64 still awaiting a second visit. Before we take a

school upon our list we send two separate inspectors at different times to visit the school, and upon the concurrently favorable report of these, the school is admitted. We have refused to accept 26 schools after visiting them at least once.

* * * * *

“The tests which the University has provided to determine the efficiency of the secondary schools are as follows:

“1. The two visits of inspectors which I have mentioned above.

“2. The reference to each departmental examiner in the University of the work of the school offered in the several departments. The data thus referred are taken from the reports of the school itself upon its own work.

“3. The observation of the work of the students from the school. It is our custom each spring quarter, generally in the month of May, to gather together the results of the work of all the students from the different schools who entered in the previous fall quarter.

* * * * *

“We very frequently do accept a school with the exception of some one or two departments. It often happens that a really good school is weak in certain spots and I do not know of a more helpful influence in the school than the refusal of our inspectors to approve these weak spots. Principals have said to me that this gives them an argument to take before their boards, (who are often prejudiced in favor of certain individuals), which is stronger than anything they could advance from their own local standpoint. And thus it often happens that schools are strengthened as a direct result of our suggestions.”

Ohio State University has a system of admission both by examination and by certificate. Its high school visitor devotes his whole time to inspecting schools of the state. The approved schools that prepare for all courses in the

University, and indeed for all American universities, constitute the accredited list; and their graduates enter upon certificate. Graduates of a second list of recognized schools are accredited to the extent of their certificates in studies as to which the schools are approved, and examined in other required studies. Non-graduates of these two classes of schools, and of all unaccredited schools, are fully examined. The Ohio State University is a member of the North Central Association of Colleges and Secondary Schools, and as such, honors certificates of schools accredited annually by the Association's inspectors; and the University, apparently holds that "it is safe for any institution to honor certificates on the North Central list."

Against this view we may commend to careful attention the "Report on Admission to College on Certificate and Examination," by Principal Charles C. Ramsey, of Fall River, Mass., published in Volume 8 of the *School Review*, December, 1900, pp. 593-604, with the discussion thereon, pp. 605-611, by President Eliot and others.

The substance of the objection to the certificate system is the fear that it will be abused; that the inspections will become even more perfunctory than they are believed by some to be at present; that the secondary schools, anxious to please their patrons, favor their scholars, or perhaps get rid of undesirables, will improperly certify them to the colleges; and that in the absence of the wholesome check believed to be exerted by the independent entrance examinations of the colleges, there will be a general decline in the scholarly standards for admission. The defenders of the system maintain that the secondary schools are strongly cautioned against these dangers by the still greater danger of thereby los-

ing their places on the accredited list, and that in fact, up to date, the tendency is in the opposite direction, viz.: to greater rigor but greater fairness by the Associated Colleges in the accrediting of the schools, and by the schools in the certifying of their pupils, than exists under the examination system itself.

Referring to the statistics assembled by Prof. Ramsey, Prof. Dexter, of Illinois University, writes:

“The returns were in favor of the certificated students; in mental ability, five to one; in the general performance of college duties, three to one.”

The list of articles in the Appendix also contains illustrative extracts from a series of other articles, both on the certificate system and on the examination system. The evils of the examination system are freely recognized by the great majority of teachers, and are frequently deplored as inevitable.

After a presentation of illustrations of these evils, taken from the papers of twelve leading schools and academies of New England, Hon. Charles Francis Adams, of the Class of '56, says on this subject, in the *Graduates Magazine* for January, 1893:

“Do not the results of the present system of fitting for the college entrance examination tend to show that the system now in use, at Cambridge at least, is working serious educational injury, and stands in urgent need of immediate and radical reformation? Might not better general results be attained (worse, in some respects, would scarcely be possible!) if, in the case of some dozen or twenty institutions which would agree to conform their whole system of courses and instruction to certain approved and specified methods, and a defined and definite programme of studies, the entrance examinations were wholly done away with, and students

were admitted on probation by certificate? Might not the experiment be at least well worthy of trial?

“Candidates from other schools not of recognized standing as preparatory institutions might always present themselves for examination, as now, and the list of officially accepted academies might be annually revised, and increased or reduced in the light of practical results. No academy, once accepted, could afford to be stricken from the list, and teachers would be under continual bond not to certify scholars who were unprepared; all such they would send up as now to take their chance in the examination.

“Under such a system the responsibility would be transferred from the examiner to the teacher. The latter would then have ample room and scope enough. No longer compelled to cram, he might seek to educate. The college, on the other hand, would bring its direct influence to bear on the whole course of preparatory education, and not judge of the candidate’s proficiency wholly by a superficial examination, the result of which, as the papers here printed already show, is largely a question of individual nerve-power in presence of an ordeal long anxiously prepared for. Is it not possible that, by this route, the seat of the existing trouble might most quickly, as well as most effectually, be reached?”

The weak point in the system of inspection and accrediting is the inadequacy of the inspection. Upon this point President Eliot said (to the N. E. Assn. of Colleges and Prep. Schools, Oct. 12, 1900, 8 School Rev., p. 610), cited in Appendix II, p. 6, *infra*:

“In the first place, in New England we have no system of really examining the condition of the secondary schools; therefore, the experiment of certificates is tried under the most disadvantageous possible circumstances. When it was first introduced into this country, an argument was made in favor of it from the German practice, secondary schools

in Germany giving an outgoing certificate valid at the university. A fatal defect in the argument was that the German secondary schools are supervised by competent government educational authorities; ours by none. In New England we have nothing more than an occasional friendly visit to some schools by some college officer. That is an extremely weak and imperfect method, though perhaps better than nothing. We are, therefore, trying the certificate system under the worst possible conditions. The public, or a student of this subject like myself, cannot get the facts which are necessary to an understanding of the working of either the certificate or the examination method. At Harvard we publish every year the number of rejections at our examinations, the percentage of rejections, the number of rejections in every subject in which we examine, and the percentage of rejections in the subject in which we examine. I know no other institution in this country which does this. Yet this publicity is necessary to secure for a student of the subject the results of the experience of large numbers of institutions. Without publicity we cannot get evidence of the working of these two systems."

He suggested that in New England the certificate system has the aid of three colleges which adhere solely to the examination system;—and whose influence tends to keep the secondary school examinations up to a high standard. He also pointed out that statistics usually show that the certified students stand higher in college than the examined students; but denied that this implied any superiority in the certificate system, the fact being that where the certificate system prevails, the secondary schools certify their superior pupils, leaving the inferior pupils to take the college examinations.

This suggests that the secondary schools are doing their work in good faith.

On the same point Dean B. S. Hurlbut writes, under date of May 19, 1906, as follows:

“Admission by certificate I do not care for, for I believe that examinations, far from perfect tests as they may be, are, nevertheless, a better criterion of a student’s fitness to carry on work in college. I do like such an inspection of a student’s school record as has now been adopted by our committee on admission. This will have, when it considers the results of a candidate’s examinations, a statement from his teacher of the quality of the work in his school, and the time devoted to each subject. *The most important step that Harvard has taken, the details of which are just completed, is the acceptance of the examinations of the College Entrance Examination Board as substitutes for our own examinations.* The board can hold examinations in far more places than Harvard can ever hope to, and thus bring Harvard within the reach of far more boys than would think of coming to Harvard were they obliged to go to places where our examinations are held. *This, I believe, is one of the most important changes our faculty has made in years.*”

As this report is passing the final proof reading comes the letter of Secretary T. G. Hart dated May 21, saying:

“I enclose a copy of the circular letter we shall send this year to headmasters of schools from which boys apply for admission. By means of this letter the Committee on Admission will have before them at the time when any individual’s admission is considered not only his examination record but also the kind of information that is ordinarily given on certificates such as are used in colleges which admit by certificate.”

The enclosure is a blank certificate of honorable dismissal, with a page, devoted to “record of school work”, providing a schedule of “prescribed subjects”, “length of time studied”, “hours per week and years”, “aver-

age grade", "remarks" and a space for "an estimate of the candidates quality". It is somewhat like the Leland Stanford certificate but much less thorough and much less rigorous. He also sends at the same time copies of the article on "New Methods of Admission to Harvard" reprinted from the Harvard Graduates' Magazine for June, 1906, which we include in the Appendix.

The progressive steps taken by the university during the past year deserve recognition by the friends of education everywhere, and are distinctly grounds for congratulation by the Associated Clubs. They show that the university authorities are alert to secure the best relations with the secondary schools in all parts of the country. These steps are installments leading on to further progress still to be made.

The responses to our circular indicate that most of the schools prefer some form of the accrediting system. Those which oppose it are mainly old or well equipped schools, whose methods are closely adjusted to the existing *status quo*. Naturally they do not desire to change. The schools of the Middle West and South, on the other hand, responding to the influence of the State Universities, nearly all favor the accrediting system. And it is in these fields that Harvard's influence is most needed.

Upon the whole subject of the relation of the colleges and the universities to the secondary schools it may be remarked, that the formation, growth and proceedings of such bodies as the "National Educational Association," "New England College Entrance Certificate Board," the "College Entrance Examination Board," the "North Central Association of Colleges and Secondary Schools," the "Association of Colleges and Preparatory Schools of the Middle States and Mary-

land'', the ''New England Association of Colleges and Preparatory Schools'', and some other associations that might be named, show that the need of such closer and more harmonious relations is universally felt, and that other institutions are working industriously to bring such relations into effect.

For better, for worse, the system of inspection and admission upon certificate is here. A majority of all American colleges employ it to some extent. The vital criticism against it is that there is too much admission by certificate, too little inspection and criticism of the secondary schools.

What should the course of Harvard be?

Whatever may be said on other phases of the subject we may well agree that the opportunity is open for Harvard to take the lead in inspecting such of her tributaries as invite it; and that there is great need at this time of means for promoting a system of critical inspection of secondary schools. Harvard authorities object to the accrediting system because it is not based on adequate inspection; and the schools desire to be accredited and invite the inspection, and thereby afford Harvard, as far as may be practicable, the opportunity to exemplify the type of inspection that is needed. They hold in substance that Harvard may cultivate closer relations with the secondary schools for her own benefit, for the benefit of the schools, and for the benefit of the entire country; that the inspection of her tributary schools by Harvard University, so far as desired by them, and their consequent improvement, would indirectly but inevitably have a beneficial influence on the whole 8,000 secondary schools referred to in our former

report. And again they hold that it would benefit the whole 500 colleges and universities, and stimulate any institution whose methods of inspection are perfunctory, to higher and better performance.

It has been Harvard's privilege to take the lead in most of the great lasting movements for the improvement of American education. Here is a movement which is being forced upon the universities by the growth, the number, the conditions and the needs of the secondary schools. Harvard may well consider the advisability of establishing a voluntary system of critical inspection of such secondary schools as may invite and welcome her advice.

The University which can examine effectively several thousand pupils every year can develop the methods and instrumentalities for successfully examining the schools as well. The value of Harvard's approval to the secondary school will be such as to make most schools seek it. The disadvantage of Harvard's disapproval will be such as to make most schools aim to be superior to the necessity for it.

The replies of the more than forty secondary schools which have responded to your committee's circular, show that they have room for much more thorough and critical inspection now, and that substantially all of them would welcome such inspection from Harvard.

It will be observed:

That by these suggestions the action here proposed is limited as follows:

(1) That the university *consider the expediency* of inspecting *such schools as invite inspection*. (It is realized that the university may have knowledge of many

considerations bearing upon the expediency of such inspection that may not be accessible to the Committee.)

(2) Therefore the recommendation is thus limited, that such inspection with satisfactory results should precede any certification.

(3) That action on certification is reserved.

(4) That measures to accomplish such inspection, if adopted, will require some time for effectuation.

(5) That meanwhile the examination system as modified by the measures of this year will necessarily remain in full force.

(6) That if such measures be adopted they will not displace but rather supplement the modified examination system.

(7) That not a substitute of one for the other but the combination of the examination system with the accrediting system is the ultimate aim of such measures.

(8) That this combination is apparently supported by the experience of most of the 339 colleges and universities referred to by the National Commissioner of Education, as well as by most of the answers we have received from the schools.

The investigation of any such question as this inevitably leads to the conclusion that a great opportunity lies open before the University; that the present means of the University are already overtaxed; and that in order to fulfill her mission and take the lead as the mother and guardian of schools, as well as the *alma mater* of alumni, her means should be increased, and her resources enlarged so as to become proportionate to the opportunity before her.

We recommend action by this body expressing that it is the view of the representatives of the Associated Harvard Clubs here assembled:

That we send congratulations to the university for the progressive movement which it has begun for closer relations with the secondary schools, and express our confidence that it will adopt other wise measures to attain this end as rapidly as the prevailing conditions will permit.

That among such measures to be taken in the near future we commend to the consideration of the university authorities the expediency of giving critical inspection to such tributary schools as invite the same.

That copies of this report be sent to the tributary schools as well as to the members of the Associated Harvard Clubs.

And that a new standing committee be appointed to continue these inquiries and make further report at the next annual session.

Respectfully submitted.

MERRITT STARR '81,

WILBUR H. SIEBERT '89,

Committee.

May 21, 1906.

For separate report by Professor Albert Bushnell Hart, '80, see Appendix IV.

Appendix:

I

Circular Letter to the Secondary Schools,
with Summaries of Their Replies.

II

Selected List of Articles Dealing With the
Examination System and the Inspection
and Certificate System of Admis-
sion to College.

III

“New Methods of Admission to Harvard,”
by J. G. Hart '93. Reprinted from
Harvard Graduates' Magazine
for June, 1906.

IV

Separate Report by Professor Albert
Bushnell Hart '80.

APPENDIX I.

ASSOCIATED HARVARD CLUBS.

COMMITTEE ON SECONDARY EDUCATION.

CHICAGO, February 27, 1906.

To the Principal or Head Master

High School

*Of or
Academy.*

DEAR SIR: The undersigned have been appointed by the ASSOCIATED HARVARD CLUBS a committee to make inquiry in reference to the relation of Secondary schools to university education.

We see in the last annual report of President ELIOT that your School is mentioned in the list of schools there given (pp. 359-370) as having prepared pupils for HARVARD during the last ten years.

We are sending out some inquiries to such schools, upon which your responses will be gratefully appreciated.

Different questions will relate more aptly to the facts at different schools; and perhaps no school will be prepared to furnish answers to all. The representative of each school is invited to respond to the questions developed by his own experience.

Among the points of interest upon which you are requested to fill in answers upon this sheet, or the blank attached, and return to the Committee, are the following:

1. What courses of study are pursued in your School?

Answer:

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2. What is the total number of boys and number of girls graduated by your School, year by year, for the last ten years?

(Please answer if practicable on blank attached.)

3. How many of these went to college, year by year?
(Please answer if practicable on blank attached.)

4. How many went to HARVARD?

(Please answer if practicable on blank attached.)

(Probably many of the schools receiving these inquiries will not have detailed records for filling the entire blank for ten years; but most schools will be able to fill out the *last group*, viz., of "totals," for the current and preceding year, which will be appreciated, even if no other details are available.)

5. From your experience, what suggestions have you to offer as tending to bring about closer relations between the schools of secondary education and the colleges?

Answer:

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(A fuller answer, by letter, to this and the following questions will be appreciated.)

6. Do you find any difficulty in meeting the entrance requirements of HARVARD?

Answer:

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7. What proportion of the pupils graduating from the primary or elementary schools tributary to your School enter it or some other secondary school?

Answer:

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8. What is the state of preparation for secondary work by pupils *entering* your School?

Answer:

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9. What is the quality of the work below the secondary school?

Answer:

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10. Is it practicable by any means (if so, by what means) to secure better primary work and an earlier entrance on secondary education? What suggestions, if any, does the experience of your School suggest in reference to this?

Answer:

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11. In how many colleges and universities is your School so accredited that its pupils are admitted upon certificate?

Answer:

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12. To what extent is your school "visited," "inspected," or "examined" by representatives of colleges or universities; and would such inspection be welcomed by your authorities?

Answer:

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Signed:

Principal of

.....

..... School.

We have prepared some tables of blank forms covering some of these points, which we enclose herewith, and should be glad to have returned filled up, so far as may be practicable and agreeable to you, with statistics of your School.

We need hardly say that the "ASSOCIATED HARVARD CLUBS" is not an agent of the University. It is a voluntary association of clubs of HARVARD men in different parts of the country who prize the cause of education and who love the University; and who are encouraged by the cordial interest taken by the University teachers in the efforts of the ASSOCIATION to increase the influence of the University throughout the country.

The present inquiry goes to other representative schools, and it is hoped that there will be such general response as to afford the nucleus of a fund of information valuable at once to the schools responding, to the University, and to the cause of education.

May we, therefore, request that you will devote a few moments to filling up the blanks in the tables enclosed and to noting answers to the other inquiries upon which the experience of your School may throw light and return same to the chairman at his address given below.

Appreciating the courtesy of your attention and response, we are,

Very respectfully,

WILBUR H. SIEBERT,
Ohio State University, Columbus.

ALBERT B. HART,
Harvard University, Cambridge.

MERRITT STARR,
Chairman.

916 Monadnock Building, Chicago.
Committee.

— ON THE —

Distribution of Graduates of Certain Secondary Schools, THEIR SECONDARY SCHOOL COURSES, COLLEGE ATTENDANCE AND DEGREES.

NATURE OF COURSE
PURSUED IN
SECONDARY SCHOOL.

	1896		1897		1898		1899		1900		1901		1902		1903		1904		1905	
	BOYS.	GIRLS.	BOYS.	GIRLS.	BOYS.	GIRLS.	BOYS.	GIRLS.	BOYS.	GIRLS.	BOYS.	GIRLS.	BOYS.	GIRLS.	BOYS.	GIRLS.	BOYS.	GIRLS.	BOYS.	GIRLS.
Classical.																				
No. of Graduates																				
Rec'g. College A. B.																				
" Harvard A. B.																				
" Other Coll. Degrees.																				
Latin & Modern Lang.																				
No. of Graduates																				
Rec'g. College Degree.																				
" Harvard A. B.																				
" Other Coll. Degrees.																				
Literary & General.																				
No. of Graduates																				
Rec'g. College Degree.																				
" Harvard A. B.																				
" Other Coll. Degrees.																				
Scientific.																				
No. of Graduates																				
Rec'g. College Degree.																				
" Harvard A. B. or B.S.																				
" Other Coll. Degrees.																				
Mechanical & Engin'g.																				
No. of Graduates																				
Rec'g. College Degrees																				
" Harvard Degrees																				
Commercial.																				
No. of Graduates																				
Rec'g. College Degrees																				
" Harvard Degrees																				
Totals.																				
No. of Grads. all courses.																				
No. Rec'g. any Coll. Deg.																				
" " Har. Deg.																				

(Signed)

Principal of

School

SUMMARIES OF RESPONSES FROM SCHOOLS SENDING BOYS TO HARVARD.

TABLE I.

	Name of School.	Location	Courses of Study.	No. of their Graduates.				No. of Graduates Entering Colleges in Last 10 Years.	No. of their Graduates Entering Harvard in Last 10 Years.	Proportion of Pupils from Local Elementary Schools Entering Secondary Schools.
				For Last 10 Years.	Boys.	Girls.	Last Year.			
1	Adelphi Academy,	Brooklyn, N. Y.	Classical. Two others	101	235	11	30	300	4	85% -
2	Bangor High School,	Bangor, Me.	" Four "	137	299	24	40	43	3	90%
3	Galveston, Ball High S.	Galveston, Tex.	" Two "	69	158	9	25	40	1	75%
4	Bloomington H. S.	Bloomington, Ill.	" Four "	110	250	14	40	166	2	80 to 90 %
5	Cleveland Central High S.	Cleveland, O.	" Two "	1915		190		347	23	Best, 100% Poorest, 10%
6	Cutler A. H. Priv. S.		" et al	2:1		39		128	56	Practically all
7	Colorado Springs H. S.	Colorado Springs, Col.	" Three "	115	216		44	168	1	95%
8	Cleveland West High.	Cleveland, Ohio.	" "						4	
9	Cook Acad.	Montour Falls, N. Y.	" "						1	90%
10	Denver High S. (No 1)	Denver, Col.	" Two "	450	650			30% to 40%	3	80%
11	De Lancey	Phila., Pa.	" Three "	150 (7 yrs.)		20			29	
12	Davenport H. S.	Davenport, Ia.	" Two "	132	285	26	50		3	33%
13	Episcopal (Yeates) Academy,	Lancaster, Pa.	" One "	34				10	5	
14	Englewood (Chicago) H. S.	Chicago.	" et al. "	1500 circa				20%	1	80%
15	Groton School	Groton, Mass.	" "	200				115 (7 yrs)	121	
16	Goodyear (Misses) School,	Syracuse, N. Y.	" et al	14					2	
17	Holbrook's Military Acad.	Sing Sing, N. Y.	" Two others	168					2	
18	Harvard School,	Chicago.	" " "	94				85	9	
19	Hughes School,	Cincinnati, O.	" " "	446	757			40% (circ)	6	50%
20	Hotchkiss School,	Lakeville, Conn.	" " "	400 circa				80% Yale 10% + Harv	18	
21	Indianapolis Shortridge H S.	Indianapolis, Ind.	" Four "	150 total per an. circ.					4	75%
22	Chicago Latin Private.	Chicago.	" Two "	70				52	11	
23	Lake Forest, Acad.	Lake Forest, Ill.	" One "	164					4	
24	La Grange High School	La Grange, Ill.	" et al	20 (per an circ)					3	90%.
25	Morristown School,	Morristown, N. J.	" " "	33				28	12	
26	Milwaukee West Side High	Milwaukee, Wis.	" Five "	196	305	32	54	144	54	1
27	Milwaukee Academy.	Milwaukee, Wis.	" Two "	65				20	3	Practically all
28	Oberlin Academy.	Oberlin, Ohio.	" " "			45			1	
29	Orchard Lake Military Acad	Orchard Lake, Mich.	" et al	207					1	
30	Northwestern Academy,	Evanston, Ill.	" " "	321	193	32	12	80% (circ)	1	
30	Oneonta State Normal,	Oneonta, N. Y.	" One "						8	Nearly all
31	Pittsfield High.	Pittsfield, Mass.	" Three "	143	311	12	47	61	17	6
53	Prosser Prep.	Kansas City, Mo.	" et al				22		2	
33	Patterson-Davenport School,	Louisville, Ky.	" One "				8		4	
35	Raven School,	Youngstown, Ohio.	" et al	221	370	30	35		16	66%
36	Pittsburg Shadyside Academy,	Pittsburg, Pa.	" Two "	270					2	95%
37	Redlands Union High School,	Redlands, Calif.	" et al.	96	150	20	17	121	1	90%
38	(Tenn. Univ.)—Baker Himel School,	Knoxville, Tenn.	" " "						1	
39	Cincinnati Woodland High.	Cincinnati, O.	" One "	317	446	40	44		9	
40	Detroit Central High	Detroit, Mich.	" et al	565	1098	77	127			90%
44	Asheville Academy,	Asheville, N. Car.	" One "	38 (5 yrs)		11			1	
45	University School of Detroit	Detroit, Mich.	" Three "	150 (7 yrs)		35		122	3	Practically all
46	Albany H. S.	N. Y.	" Four "					176		
47	University School Columbus,	Columbus, Ohio.	" One "						1	
48	Berwick Academy,	Berwick, Me.	" Three "	74				29	1	65%

The data for the last three years usually include students now in college.

(41) The Cleveland South Side High School (42) Grinnell and (43) Woodstock Academies sent letters without data.

The returns from the schools on men entering Harvard vary from university records, e. g., when a high school boy attends a fitting school for a year and then enters Harvard both schools claim him the university credits but one.

TABLE II

SUMMARIES OF VIEWS OF AUTHORITIES OF SECONDARY SCHOOLS SENDING BOYS TO HARVARD.	THEIR SUGGESTIONS FOR IMPROVING RELATIONS OF COLLEGES AND SECONDARY SCHOOLS.	DIFFICULTIES IN HARVARD EXAMINATIONS. OTHER VIEWS THEREON.
Adelphi Academy.	Uniform requirements for entrance and secondary athletics by a college trust.	No difficulty.
Bangor High School.	Exchange school visits, by authorities of college and secondary schools.	No difficulty.
Galveston Ball High School.	Require teachers to be university graduates.	No difficulty (but do not give solid geometry)
Bloomington H. S.		No difficulty; more pupils would go to Harvard if less language were required
Cleveland Central High School	By associations, <i>e. g.</i> , North Central Ass. Colls. and secondary schools, etc.	No difficulty if pupil begins early enough.
Cutler A. H., Priv. S.		No unreasonable difficulty. German requirement is too severe; urges separate installment examinations.
Colorado Spgs. H. S.	More inquiry by college for suggestions from secondary schools.	No difficulty.
Cleveland West High.		None for the bright few who undertake it.
Cook Acad.	Colleges should exchange visits and papers with secondary schools.	Not for persistent students.
Denver High (No. 1).	Admission by certificate.	None except in physics and science work. Physics papers are above high school grade.
De Lancey.	More sincerity in living up to standards, college gatherings with school men to discuss relations.	No difficulty; Harvard examinations are a little harder than others, but no complaint.
Davenport H. S.	More mutual understanding of each other's conditions	No, generally.
Episcopal (Yeates) Acad.	Strengthen the middle state board with 2 school and 1 college man. Fewer requirements; more teaching, more visits and encouragements from the colleges.	No. They require more maturity than others, which repels boys.
(Chicago) Englewood H. S.	Conferences between college and high school faculties.	No. Except remoteness, and the attractions of Chicago, Michigan and nearer schools.
Groton School.		No difficulty; prefers the old system requiring all examinations to be taken in 2 yrs.
Goodyear (Misses) School.		No difficulty.
Holbrook's Military Acad.		Yes; particularly in Latin and Greek. The Harvard candidate must often be put in a class by himself.
Harvard School.	Present associations of college and secondary faculties very good.	We find them very exacting, taxing to the utmost, but always within reach of good schools and able scholars.
Hughes School.	Most colleges make some unreasonable demands.	We meet Harvard requirements, but only by extra work.
Hotchkiss School.	Intervisting clubs, frequent conferences, formal and informal.	Only because Harvard and Yale will not get together on Latin, English, etc.: 80% go to Yale.
Indianapolis Shortridge H. S.	Let colleges accept good work in commercial, manual training and social subjects.	No special effort to do so; only the best can do so in 4 years.
(Chicago) Latin, Private.		No difficulty; most of our boys who go enter without conditions. Harvard examinations require great maturity.
Lake Forest Acad	Frequent visits and suggestions by college authorities.	Ordinarily no difficulty
La Grange High School	A system of inspection and certificate.	Easily met; but work is shaped more toward neighboring institutions.
Morristown School	College visitors GRADUATE CLUB VISITORS.	We have in the past, owing to "inhospitable" regulations and complicated definitions of requirements. That situation is now much improved.
Milwaukee West Side High	A reasonable system of accrediting upon certificate based on inspection by college.	No; but reluctance of pupils to go and take short examinations as test of four years' work.
Milwaukee Acad.	Combination of certificate and examination as at Williams	No difficulty except in scientific work.
Oberlin Acad.		Not if boy's plan is formed and known early enough.
Orchard Lake Military Acad	Favors the certificate system.	No difficulty for boys willing to work.
Northwestern Acad.	Visitation, lectures by college men, conferences.	We have few candidates for Harvard.
Ontonata State Normal.	Visitation by college representatives.	No difficulty.
Pittsfield High.	More liberality in accepting students by certificate.	Yes; usually a fifth year or private tutoring is necessary.
Prosser Prep.	More uniform entrance requirements.	Plenty of difficulties; but we have always overcome them by hard trial. Examinations are fair.
Patterson Davenport School.		No; but the Harvard examinations require more careful training than others; most of our boys pass without conditions.
Rayen School.	More elasticity of requirements, combination of examination and certificate	With bright students, none if they plan to enter from the first; with others, yes, particularly if they do not take Greek.
Pittsburg Shadyside Acad		Examinations more difficult than Yale, Princeton or any of the 35 colleges for which we fit.
Redlands Union High School	More liberality in accepting students by certificate	
(Tennessee University)—Baker Himel School.		Only when pupil does not take Greek.
Cincinnati Woodland High.		
Detroit Central High.	Better understanding by college authorities of secondary pupil and his needs.	Yes, in four years; too much is required.
Asheville (N. Car.) Acad. (Private).	Visits from Harvard would increase Harvard attendance from the South.	No difficulty. Suggests that English A be made a preliminary subject.
University School, Detroit.	A carefully supervised and fearlessly administered certificate system, together with conferences.	Formerly, yes; but under new plan shall have little difficulty. Examinations are pernicious in influence on real cultural work. Indorses article in <i>Atlantic</i> , Sept., 1894, on "The Preparatory School."
Alhany H. S.		No. The few who enter Harvard do some work not required in our course.
University School of Columbus, O.		Only that the boys will not stay long enough.
Berwick Academy.	Requirements too numerous. Wellesley requirement with high standard is far better than the more recent requirements of Harvard.	No. But we can send men who will be better students if requirements didn't "spread." so much.

TABLE III.

SUMMARIES OF VIEWS OF AUTHORITIES OF SECONDARY SCHOOLS SENDING BOYS TO HARVARD	STATE OF PREPARATION OF THEIR PUPILS AT ENTRANCE ON SECONDARY SCHOOLS—QUALITY OF ELEMENTARY EDUCATION.	MEANS OF IMPROVING ELEMENTARY WORK AND SECURING EARLIER ENTRANCE ON SECONDARY EDUCATION
Adelphi Academy.	Variable	Begin H. S. work in 8th grade; reduce arithmetic; increase nature work, history, composition; avoid arbitrary inconsiderate action.
Bangor High School	Unsatisfactory, especially in English	Avoid grading by years; more elasticity in grades.
Galveston Ball High School.	Good.	Abridge and condense in arithmetic. Elevate requirements as to teachers.
Bloomington H. S.	Good.	Better teachers; better pay for teachers.
Cleveland Central High School		
Cutler A. H. Priv. S.	Good; urges more English work in the grades.	Believes closer relations would save one year in grades.
Colorado Spgs. H. S.		
Cleveland West High.	Good.	
Cook Acad.		
Denver High S. (No 1)	Excellent up to 6th grade; thereafter impaired by multiplicity of studies.	Believes requirements too high and too complex; urges simplification and relieving the grades from unprofitable work.
De Lancey.	Draws from well conducted private elementary schools.	Does not favor earlier beginning of prep. work in this school; our grads enter Harvard one year under average age now
Davenport H. S.	Good.	Better teaching of fewer subjects. Begin H. S. subjects earlier.
Episcopal (Yeates) Acad	Poor from lack of system and articulation of elementary to secondary schools. Earlier systematic training greatly needed.	Urges uniform requirements for admission to secondary schools, with Bd. of Inspection.
(Chicago) Englewood H. S.	Generally good.	Favors segregation of sexes. Boys hopelessly in minority, become dissatisfied.
Groton School.		Thinks senior study begins too late; suspects the kindergarten is the cause.
Goodyear (Misses) School.		
Holbrook's Military Acad.		
Harvard School		Begin language and mathematics earlier
Hughes School	Fair. Fewer subjects should be attempted.	Secondary work should begin 2 yrs. earlier
Hotchkiss School.	Very uneven. Our pupils come from every state in the U S.	
Indianapolis Shortridge H. S.		We are trying Latin, English and Algebra in 8th grade.
Chicago Latin, Private		So long as present requirements are maintained, age of entrance cannot be much reduced.
Lake Forest Acad.	Too many studies pursued; not enough concentration.	Standards for elementary teachers are too low
La Grange High School.	Inclined to be wooden and mechanical	We receive on examinations at end of 7th grade.
Morristown School.		Need of better classification of schools into <i>elementary</i> and <i>secondary</i> , with different handling for each.
Milwaukee West Side High.	Good; but it takes too long for pupils to reach secondary schools.	Confine grade work to essentials, more training in English.
Milwaukee Acad.		
Oberlin Acad.		Am not anxious to have pupils enter secondary schools earlier, but better trained.
Orchard Lake Military Acad		Better teachers; better pay for teachers; less politics in public schools.
Northwestern Acad.		H. S. work should begin in 8th grade.
Oneonta State Normal	Very good.	H. S. work should not be hurried or forced.
Pittsfield High.	Fairly good.	Doubts the desirability of earlier entrance; health first.
Prosser Preparatory.		Not advisable to seek earlier entrance.
Patterson Davenport School.		Better teachers; fewer studies; more work on essentials.
Rayen School.		For real preparatory work maturity an important factor; usually should not begin before 14. Early decision of course and plan necessary to early entrance to college.
Pittsburg Shadyside Acad.	Very unsatisfactory; so our courses are for 6 years' work.	Employment of <i>educators</i> instead of <i>inefficient</i> teachers in public schools.
Redlands Union High School		Believe earlier beginning of secondary work practicable.
(Tennessee University)—Baker Hemel School		More training in and emphasis on English and expression are needed.
Cincinnati Woodland High		
Detroit Central High.	Generally satisfactory, according to prevailing standards.	Begin secondary mathematics and languages in 7th year of elementary school.
Asheville, (N. Car.) Acad. (Private).	Fairly good. Pupils come from all sections of country; chiefly from northern states. No uniformity. Those from Michigan and N. Y. have best preparation.	More attention to fundamental studies; nature studies are poorly taught. Elevation of standards for primary teachers, requirement of refinement and culture and fitness for teaching, as well as intellectual ability.
University School, Detroit, (Private).	Too much "marking time" dulls the bright boy before reaching secondary school.	We begin Latin in the 7th grade and Algebra in 8th grade with good results. Much time is wasted in grammar schools.
Albany H. S.	Fair.	Better teachers needed.
University School of Colum- bus, O.		
Berwick Academy, Me.	Preparation about 12½% below the Massachusetts average. Quality of elementary work not good except where much help given outside school.	Better enforcement of present laws and requirements. New requirements with administration removed from politics.

TABLE IV

SUMMARIES OF VIEWS OF AUTHORITIES OF SECONDARY SCHOOLS SENDING BOYS TO HARVARD.	a. HOW FAR ACCREDITED.		a. HOW FAR INSPECTED BY UNIVERSITIES.	
	b. VIEWS ON THE CERTIFICATE SYSTEM.		b. IS INSPECTION WELCOMED?	
Adelphi Academy.....	a.	Wherever desired.	a.	By N. Y. Regents.
Bangor High School.....	b.	Opposed to certificate system.	b.	All inspection is welcomed.
Galveston Ball High School...	a.	By all which admit on certificate.	a.	Not at all.
Bloomington H. S.	a.	Generally; Univ. Tex., Chicago., Cornell, etc.	a.	By Texas and Tulane.
Cleveland Central High School	a.	Generally.	b.	Yes.
Cutler A. H. Priv. S.	a.	Generally.	a.	By Univ. of Ill., Chi., Mich., frequently.
Colorado Spgs. H. S.	a.	Is qualified, but makes little use of certificates.	b.	Yes.
Cleveland West High.....	a.	By about 20, Mich., Wis., Chi., Cornell, Colorado, etc.	a.	By Univs. of Ohio, Chi., Mich. et al.
Cook Acad.	a.	Generally.	b.	Yes.
Denver High (No. 1).	a.	Generally.	a.	By N. Y. Regents.
De Laney.....	b.	Favors admission by certificate.	b.	Welcomes thorough inspection.
Davenport H. S.	a.	Only by Cornell, Williams, Lehigh.	a.	By those named in preceding column at frequent intervals.
Episcopal (Yeates) Acad.	b.	Opposed to certificate system.	a.	Very generally and frequently.
(Chicago) Englewood H. S. ...	a.	Generally.	b.	Yes.
Groton School.	a.	Generally.	a.	By Cornell et al., in N. Y.
Goodyear (Misses) School...	a.	By Cornell, Syracuse, Wellesley and Smith.	b.	Yes.
Holbrook's Military Acad.	a.	Generally.	a.	Occasionally, Calif. Stanford, Chi., Wis.
Harvard School.	a.	By ten leading schools.	b.	Yes.
Hughes School.	a.	Generally.	a.	Only most formally, and that not to see our work but to secure students.
Hotchkiss School.	b.	We do not give certificates.	b.	Heartily welcomed.
Indianapolis Shortridge H. S. .	a.	Generally.	a.	Regularly every two years by some, less frequently by the others.
Chicago Latin Private.	a.	Our certificates have not been refused; but nearly all our boys enter where certificates are not taken.	b.	No real inspection.
Lake Forest Acad.	a.	By all the middle and western institutions and some eastern.	b.	Should be glad of college inspection.
La Grange High School	a.	Generally.	a.	Annually by state university inspector.
Morristown School.	b.	Favors certificate system.	a.	None.
Milwaukee West Side High	a.	Not any; pupils go to non-certificate colleges.	b.	Welcomed at any time.
Milwaukee Acad.	a.	Generally.	a.	Seldom.
Oberlin Acad.	b.	Favors reasonable certificate system.	b.	Welcomed.
Orchard Lake Military Acad.	a.	Generally.	a.	No regular inspection.
Northwestern Acad.	a.	Generally.	b.	Welcomed.
Oneonta State Normal.	a.	By 12 to 15 institutions.	a.	Once in 2 years by Michigan and Wisconsin.
Pittsfield High.	a.	In seven institutions outside New England. Certificate Board application pending.	a.	By Mich., Ohio and the visitor of the North Central Association.
Prosser Prep.	b.	Favors certificate system.	a.	Not at all.
Patterson Davenport School...	a.	Generally.	b.	Competent inspection and criticism welcomed.
Rayon School.	b.	We prefer examinations.	a.	By a few occasionally.
Pittsburg Shadyside Acad.	a.	Generally. This year in 38 colleges and universities.	b.	Yes.
Redlands Union High School	b.	Favors combination of certificate with examinations.	a.	Occasional.
(Tennessee University)—Baker	a.	By 22 institutions.	b.	Always welcomed.
Hemel School.	a.	Generally.	a.	Very little. (Is part of Lake Forest Univ.)
Cincinnati Woodland High...	b.	Favors certificate system.	b.	Inspection is welcomed.
Detroit Central High.	a.	By southern universities.	a.	Every year by several inspectors, from each larger institution every 3 years.
Asheville, (N. Car.) Acad. (Private).....	a.	By Mich., Cornell, Williams, Ohio State and all to which we have applied.	b.	Always welcome.
University School (Private), Detroit.....	a.	Is on accredited list of North Central Association, also accredited by Williams, Amherst, Brown, Trinity, Cornell, etc.	a.	Practically none.
Albany H. S.	a.	Favors carefully supervised and fearlessly administered certificate system.	b.	INSPECTION OF SECONDARY SCHOOLS IS SORELY NEEDED FOR MUTUAL BENEFIT OF SCHOOL AND COLLEGE.
University School, Columbus, O.	a.	By all in the eastern middle states, that admit on certificate.	a.	Regularly each year by representatives of nearer institutions.
Berwick Academy, Me.	a.	Amherst, Williams, Dartmouth, Western Reserve, Ohio State, Ohio Wesleyan, Marietta, Wooster (by 4 Ohio and 3 New England institutions).	b.	We welcome inspection.
	a.	By all the New England Colleges, save Harvard, Yale and Institute of Technology.	a.	Regularly by Wisconsin.
			b.	Yes.
			a.	By the Ohio state visitor.
			b.	Any such inspection would be welcomed.
			a.	By Michigan and Wisconsin.
			b.	College inspection welcomed.
			a.	Is part of N. W. Univ.
			b.	Welcomed.
			a.	None.
			b.	Welcomed.
			a.	Not at all.
			b.	Welcomed.
			a.	By visitors of state universities and by Williams College.
			b.	We welcome inspection.
			a.	None.
			b.	Welcomed.
			a.	Not in last few years.
			b.	Always glad to be inspected.
			a.	By representatives of the schools honoring our certificates.
			b.	Annually by Univ. of Calif. visitors.
			a.	Most welcome.
			b.	Very little.
			a.	Inspection by teachers welcomed.
			b.	By Univ. of Mich. every three years.
			a.	From any college is welcome.
			b.	By representatives of different colleges; but not in the way that Univ. of Mich. inspects Mich. schools.
			a.	Glad to have representative of THE COLLEGE visit us.
			b.	Regularly by Mich. Univ., by Univ. of Chicago and Case School of Applied Science (Western Reserve Univ.).
			a.	Always welcomed.
			b.	(Is under shadow of N. Y. Regents.)
			a.	They (others) would be welcome but they "come not."
			b.	Last visit 1900 (Is under shadow of Ohio State University).
			a.	Inspection welcomed.
			b.	Some representatives of N. Eng. College Entrance Certificate Board visit us every year and one or more from Maine colleges.

APPENDIX II.

SELECTED LIST OF ARTICLES DEALING WITH THE EXAMINATION SYSTEM AND THE INSPECTION AND CERTIFICATE SYSTEM OF ADMISSION TO COLLEGE.

1. Admission to College by Certificate.

a. Cyrus Northrop, President, University of Minn.

b. Merrill E. Gates, President, Amherst College.

c. James H. Canfield, Chancellor, University of Nebraska.

d. O. M. Fernald, Williams College.

e. Martin Kellogg, University of California.

f. John Tetlow, Girls' Latin School, Boston.

—*Educational Review*, February-June, '93.

1 *a.* An Argument for the Certificate Plan.

President Northrop says:

“To sum up the whole matter in few words: Our experience has taught us that the advantages of this system are:

1. It raises the grade of the preparatory schools.

2. It gives us students better prepared for university work.

3. It does away with an immense amount of work and worry incident to examinations.

4. It gives us better results from the student when he is once in the university.

It has no drawbacks at all commensurate with its advantages. It has been seldom that we have had cause to regret our action in any particular case, and it is safe to say that not a member of the Faculty of this University would go back to the old method of examination for all cases.”

1 c. James H. Canfield (then Chancellor of the University of Nebraska; afterwards president of Ohio State University, and now Librarian at Columbia) gives a summary of twelve reasons in favor of the certificate plan, as follows:

1. In the West, at least, very few students present themselves for examination at commencement. They cannot afford two trips to the university.

2. Therefore, in the West, at least, most students come to the September examinations rusty, by three months vacation, and conscious of this to a point of loss of assurance and of great embarrassment.

3. In the West, at least, it is still quite impossible to hold all entrance examinations on a given day. Students cannot always afford to drop work in the middle of the month, or come up early in the fall.

4. Everywhere there is a tendency to make some entrance examinations rather light, and to trust much to personal impressions of a student and of his work.

5. An examination conducted by a stranger to the student and his habit of thought and to the methods of his instruction—and conducted at a time of peculiar embarrassment to the person examined—cannot, in the nature of things, secure just or adequate results.

6. Such an examination tells almost nothing of *power*—which is far more important than mere information.

7. Admission by certificate brings all parts of the school system together in a helpful and stimulating way.

8. It is a recognition which ought to be rendered by the university to workers in other parts of the State system.

9. Students admitted by certificate have secured quite as good average standing as those coming in by examination. If there is any difference it is in favor of the former.

10. Everything connected with regular school

work and usual examinations helps to fix a just and accurate estimate of the success, power and knowledge of a student; while nearly every condition of the university entrance examinations is against such an estimate.

11. The standard of an institution is not determined so much by its criticism of work done elsewhere (examinations) as by its own work.

12. The doors of any institution may safely swing inward quite easily; but it ought to take hard work to make them swing outward (*i. e.*, suggests that examinations ought to be stricter for graduation than for admission).

1 *d.* Williams has pursued the system since 1876.

Prof. O. M. Fernald says:

“It should be remembered that * * * it does not abrogate examinations for admission. It simply shifts the place from the college to the school. It is upon the results of examinations and of other such processes that certificates are based. And it hardly needs argument to show that an intelligent and discriminating teacher, after several years of observation and scrutiny of a class in examination and recitation, has wider and better data on which to base a judgment of the boys’ fitness for college than can be secured from the necessarily hurried entrance examinations at the college itself.”

1 *e.* The Certificate system in use in University of California since 1884. Article by Prof. Martin Kellogg, 5 Ed., Rev. 384.

1 *f.* By Professor John Tetlow. An argument in favor of the use of the two systems (the certificate system and the examinations system) together; holding that each is benefited by the presence of the other.

2. College Admission Requirements.

2 *a.* Charles H. Keyes, Supervisor of Schools, Hartford, Conn.

Ed. Rev. Jan., 1900, Vol. 19, pp. 59-67.

And see Pres’t Butler’s article cited below.

- 2 *b.* A. Lawrence Lowell.
Ed. Rev., 1896 (May), Vol. 1, pp. 468-72.
- 2 *c.* J. H. Kirkland.
Sch. Rev., 7 Sept., 1899, pp. 388-408.
- 2 *d.* A. F. Nightingale.
N. E. A., 1897, pp. 647-652.

2*a.* A synopsis and discussion of the report (report of Committee on College Entrance Requirements, July, 1899, published by the National Educational Association, 188 pp.), by Prof. Chas. Keyes, urging the colleges to restate their requirements in the terms of the national norms, or to announce that the courses recommended by the Committee of the N. E. A. on college entrance requirements will be accepted as alternatives.

2*b.* A plea for elementary instruction in the colleges and for the beginning of preparatory work earlier, by Prof. A. Lawrence Lowell.

"A plea for the articulation of the upper and lower parts of the educational system," by N. S. Shaler.

May, '93; 11 Ed. Rev. 472.

"I personally hope it may extend from shop work to Greek."

The aim is to take into account in our entrance requirements all the work of the secondary schools.

3. College Entrance Requirements in History. Albert Bushnell Hart, Ed. Rev. Dec., 1895, 10 pp., 417-429.

A discussion of the value of history as a study for secondary schools and the need of increased teaching force and facilities in the secondary schools to provide for the enlarged curriculum.

Prof. Hart wrote:

“In any event, the secondary schools are aware that they are expected to solve all the educational problems; all hands call upon them to accomplish more; the kindergartens on the gun deck, the grammar schools on the main deck, the colleges on the quarter deck, the technical schools in the chains, the graduate schools in the topgallant yards—all look to the secondary teachers as the able seamen of educational reform.”

4. Conclusions as to uniform college entrance requirements, by The Columbia Conference of 1896.
11 Ed. Rev., 494-501.

A report (May, 1896) giving a list of such uniform requirements recommended by the conference.

5. Conflicting views regarding Entrance Examinations.
5 a. By President A. T. Hadley, 8 Sch. Rev., p. 585.

“If entrance examinations are to be regarded as a test of ability to go on with the work of the college, our present methods of handling them can only be defended on this theory. We are making a rough application of the doctrine of chance.”

President Hadley urges a reform in the system by which examinations will test *not the extent of previous study*, but *the power for future work*.

- 5 b. Report on Admission to College on certificate and by examination. Charles C. Ramsey, Sch. Rev., 8, pp. 593-604.

The last two numbers are among the most valuable in the list. They are taken from the report of the 15th annual meeting of the New England Association of Colleges and Preparatory Schools held at Huntington Hall, Mass. Inst. of Tech., Boston, October 12, 1900.

President Hadley presented the leading paper. Principal Ramsey, who frankly opposed the certificate system, collated statistics from twenty-nine secondary schools, seventeen colleges, and from the Faculty of a representative High School and a representative College. President Eliot presided, and took an important part in the discussion, summarized in the Report, pp. 26-27, *supra*.

The papers of President Hadley and Principal Ramsey, with the discussions, occupy twenty-eight pages of the School Review for December, 1900 (Vol. 8, pp. 583-611).

6. The Equalization of the requirements for admission into the different courses leading to the First Collegiate degree.

F. W. Moore, in Sch. Rev., 10 March, 1902, pp. 217-223, advocates the treatment of candidates for B. S. on equal terms with candidates for B. A. See Resolution No. 2 in Los Angeles Report, to same effect.

7. The Harvard Reform in Entrance Requirements.

Prof. Albert B. Hart, discussing the then new scheme adopted in May, 1899, said (Ed. Rev., 18 Oct., 1899, pp. 263-280) :

“During the last thirty years (1868-1898) there appear to have been but twelve years in which some change was not made, either in the definition of individual subjects or in the combinations of subjects. In 1872 alternatives were first allowed; in 1874 English became an admission subject; then division of the examination into preliminary and final was permitted and sight translation appeared; in 1875 modern languages came in; from 1876 elementary science. A great step was taken in 1878, when a system of so-called advance subjects was introduced, through which the college required a choice out of a

list of subjects, which would be extensions of some of the elementary required studies. Thus up to 1887, Harvard steadily advanced in the number of subjects required, in the thoroughness of preparation in each; and in a method of combination of elementary subjects with elective advanced subjects. In 1887 came the first pitched battle between the old-fashioned classical training and the advocates of newer branches. * * * (With reference to the address of that year by Charles Francis Adams on 'The College Fetish.') * * * In the long run, therefore, the question whether an ill-prepared boy will get into Harvard College or fail depends upon a complexity of influences, the most important of which is the committee on entrance examinations. The masters and teachers in the great fitting schools have learned the standard of that committee, which is reasonably steady, *and can pretty closely predict whether a boy is or is not likely to get safely through the ordeal.*"

Professor Hart concludes, p. 229, that

"after weary and even impatient months of discussion the question of entrance requirements at Harvard is settled for probably ten years to come."

"In a previous article upon this subject it was suggested that the college hoped through its decision to be helpful to education throughout the community. This remark brought down the criticism of an alumnus upon Harvard teachers who spend time in doing something else than teaching students of Harvard College." Reply: Harvard's work is unselfish.

Quotes Congregational clergymen concerning the endowment of Chicago University, "You can't spend seven millions on Baptists only."

8. Reform of College Entrance Requirements. By Wilson Farrand.

In inaugural address—of the Schoolmasters' Association of New York and vicinity, October 12, 1895. 10 Ed. Rev., 430-444.

Criticises requirements and examinations alike for lack of uniformity.

Idiosyncrasy of Examiners; examinations as mediums for illustrating the examiners' theories of education; the opportunities afforded by the examination system for the evils of coaching system; examinations as traps for the unwary.

“These, then, are the charges that we have to bring against the present requirements for admission to our colleges—first, the lack of uniformity; second, the varying standard of enforcement; third, the uncertainty and inaccuracy of administration; fourth, the specific and detailed character of many of the examinations.”

Examinations as a lottery; the attempting of too much examination in too brief a period.

Professor Farrand recommended:

1. The requirement of certificates of the amount and character of work done.
2. The use of general examinations.
3. The decision as to admission should be based on both examination and certificate.
4. Improvement in methods, or administration of examinations.
5. Uniformity of entrance requirements.
9. Resume and Critique of the college entrance requirements in Natural Science. C. S. Palmer in *Sch. Rev.*, June, 1896, Vol. 4, pp. 452-460.
10. Should colleges lower their standards of admission? Wm. T. Harris, in *Ed.* 17 June, 1897, pp. 579-585.
11. Tabular statements of entrance requirements to representative colleges and universities of the United

States. Chase and C. H. Thurber, in Sch. Rev., June, 1896, Vol. 4, pp. 341-405.

12. Uniform college admission requirements with a joint board of examiners. By Nicholas Murray Butler (Ed. Rev., Jan., 1900, Vol. 19, pp. 68-74), in an address before the Association of Colleges and Preparatory Schools of the Middle States and Maryland, at Trenton, N. J., Dec. 1, '99.

Holds that when co-operation with other colleges is demonstrably in the public interest, such co-operation is a duty.

Professor Butler said:

"I have not concealed from this association in years past my view that there should not be any problem of college entrance at all and that *the formal examination for admission to college is a survival which should be chiefly of historic interest.*"

* * * "There is need not alone of uniform requirements for college admission, but of uniform administration of those requirements. * * * This proposal for a uniform series of college entrance requirements administered by a joint board of examiners is not new. It was made to the Association of Colleges in New England in November, 1894, by President Eliot, and was repeated by him before the New York Schoolmasters' Association on February 8, 1896."

On December 22, 1893, President Butler had introduced a resolution at a meeting of the Columbia College Faculty looking to the establishment of a College Admission Examining Board, * * *

"the certificate of such Board to be accepted for what it covers by any college or scientific school represented; such examinations to displace as soon as practicable those now held by the several institutions separately.

Such co-operation between the colleges would help them greatly. It would drag them out of their isolation and help to overcome their provincialism. It would increase the college attendance.”

13. Uniform Requirements for College Admission. H. A. Fischer (of Wheaton College), N. E. A., 1890, pp. 705-707.

14. Uniform Standards in College Preparation. 9 Educational Review, 148-158 (1895).

A short symposium of the views of college presidents and others, collected by William H. Butts.

Proceedings and addresses of the Thirty-eighth Annual Meeting of the National Educational Association held at Los Angeles, California, July 11-14, 1899, published by the Association (printed by the University of Chicago Press, Chicago), pp. 1-1258: Reports on College Entrance Requirements, pp. 625-817, signed by the chairman and original committee in which Harvard was represented by Paul H. Hanus, Professor of the Science and Art of Education at Harvard, and among the committee of twelve, by Prof. Clement L. Smith, of Latin. Among the fourteen special resolutions in that report we may call attention to Nos. 7 and 12 as follows:

VII. *Resolved*, That the colleges will aid the secondary schools by allowing credit toward a degree for work done in secondary schools, beyond the amount required for entrance, when equal in amount and thoroughness to work done in the same subjects in college.

XII. *Resolved*, That we recommend that any piece of work comprehended within the studies included in this report that has covered at least one year of four periods a week in a well equipped secondary school, under

competent instruction, should be considered worthy to count toward admission to college.

15. Report of United States Commissioner of Education for 1902, Vol. 1, Chap. 12.

“Admission to College on certificate of secondary schools” contains a general statement of the questions:

The by-laws of the New England College Entrance Certificate Board:

Historic survey of the accrediting systems of different State universities:

A list of institutions admitting students on certificate; and the address by Prof. A. S. Whitney of the University of Michigan, delivered in 1902, at the annual meeting of the Association of Colleges and preparatory schools of the Middle States and Maryland, at Baltimore, and printed in the *School Review* for February, 1903 (summarized in report, pp. 14-20, *supra*).

16. College Examinations, by Prof. N. S. Shaler. 68 *Atlantic Monthly*, 95-102.

A clear statement of the evils of the examination system with valuable suggestions for improvement. The article is devoted rather to examinations within the college than to examinations for admission to college. In particular, Professor Shaler urges the use of a secondary system of instruction embracing the work of tutors and auxiliary teachers who will conduct parallel and supplementary teaching; the use of written exercises which “keep the student continually in face of the problem with which he is dealing,” including inspection of note books and the frequent writing of theses; the abolition of the proctored examination, and the requirement that the pupils who have taken a written examination subsequently re-write their papers as a work of review, putting them into the best practicable form.

17. The Dangers of Examinations, by W. B. Jacobs, Sch. Rev., Nov., 1896, Vol. 4, pp. 675-681.

18. Dangers of Examinations, by Chas. F. Wheelock, School Review, Vol. 5, pp. 43, Jan., 1897.

A commentary on No. 2, with extracts from the report of President Schurman of Cornell for 1896.

“The students who have entered Cornell University during the past six years are divided into three groups as follows:

1. Those who were examined for admission.
2. Those who entered on certificates other than regents' diplomas.
3. Those who entered on regents' diplomas.

Of the first class 18.53 per cent. were found deficient in ability to do the required work in the university and were dropped. Of the second group 11.14 were dropped, and of the third group 6.46 per cent.”

19. Educational Value of Examinations, by Prof. James Seth, of Cornell University. Ed. Rev., Sept., 1896, Vol. 12, pp. 133-37.

A good word for the examination system.

20. Examinations, by Wm. B. Harlow. Education VIII, Jan., '88, pp. 321-324.

21. Examinations, by Henry Lincoln Clapp, Master of George Putnam School, Boston. Ed., Vol. 21, pp. 387-397, Mch., '01.

A humorous defense of examinations and belittlement of their defects.

22. Examinations, by Frederich Paulsen, of the University of Berlin. Ed. Rev., Sept., 1898, Vol. 16, pp. 166-176.

A clear statement of the special evils of State examinations.

23. Examinations—an Apology, by Angie C. Chapin. Ed. Rev., Dec., 1900, Vol. 20, pp. 519-521.

24. Examinations and Promotions, by Emerson E. White, State Superintendent for Ohio. Education VIII, April, '88, pp. 517-522.

25. Examinations in Colleges and Schools, by Barr Ferree. Ed. Vol. 10, pp. 1-10, Sept., 1889.

A strong statement of the evils of the examination system.

26. The Influence of Examinations, by Edgar H. Nichols, of the Browne & Nichols School, Cambridge, Mass. Ed. Rev., May, 1900, Vol. 19, pp. 443-459.

“I have no desire to abolish examinations, but I have a strong desire to see them relegated to their proper place in our educational system.” * * *

“Under our present system an importance is attached to examinations that is out of all proportion to their value, so that their influence for good is minimized and their influence for evil is unduly magnified. If the colleges would establish as a fundamental principle that the quality of the previous work and the method of preparation, rather than the mere passing of examinations, are the decisive factors in determining admission, we teachers in the secondary schools would be left free to look at the college examinations as naturally and rationally as we do those set by ourselves; and we should be greatly aided in our efforts to make the college examinations have the elevating influence upon school work that they are designed to have and should have. But it is useless for us to try to make the older pupils believe that the passing of an examination is of value to them—not as the end and aim of their work—but merely as an indication of the character of their previous work, when the colleges proclaim a different standard.

“It is an artificial value assigned to the mere pass-

ing of examinations that makes them a terror to the conscientious, sensitive student, and an object of well-deserved contempt to the lazy, heedless student who trusts to what he calls his luck, and who not infrequently receives credit that he knows is not due. * * * It is just here that the colleges exert such a baneful influence upon secondary education. They not only set this false standard of success to pupils who apply for admission to their doors from secondary schools, but they maintain the same standard among themselves. * * * President Eliot in his annual report recently published (1900) makes the most welcome announcement that the long struggle to give new and intelligent rating to the old subjects required for admission to Harvard and to secure recognition of the value of certain new subjects has been won; and says that the 'Faculty of Arts and Sciences looks forward with pleasure to a long period of repose so far as this difficult subject is concerned.' * * * But however well pleased the Faculty may be with the result of its efforts I do not think that we teachers ought to think of repose until the Faculty has done something to assure a fair test of the quality as well as of the quantity of the preparation; something to help us in our own peculiar problem of keeping before the pupils a high standard of work that shall make *thoroughness* rather than the passing of examinations the goal of their efforts." * * *

"In no case either in the promotion from one class to another in the same institution, or in the promotion from one institution to another, should the result of a single set of examinations be the sole factor considered; that as a principle of almost equal importance, teachers in judging pupils for examination should have the privilege, or better, the duty, of sending with their list of candidates a grading that shall truthfully report their standing in the school work in the subjects presented, accompanied by such brief comments on the individuals as would be of value to an examiner. For the sake of simplicity these facts and comments in the cases of candidates

for Harvard could be sent in by each school on one sheet similar to that now (1900) sent to us by the colleges with the results of the examinations; this sheet could take the place of the present complicated certificates for each individual; one for preliminary examination, another for honorable dismissal, and another for postponing candidates, and still another containing opinions and advice as to individual character. These sheets should be consulted before credits, conditions or doubtful pass marks are assigned; and if found to be in general harmony with the results of the examinations, should have the balance of power in deciding particular questions of doubt."

27. R. H. Quick on Examinations, by Hon. Henry Sabin. Education, Dec., 1900, Vol. 21, pp. 210-216.
28. School Examinations, by Mary A. Leonard. Ed., Vol. 21, pp. 282-287, Jan., '01.
29. School Examinations, by William W. Hyde. Forum, Vol. 7, pp. 305-313, May, 1889.
30. Should Examinations be Abolished? By Geo. M. Steele of Auburndale, Mass. Education, Vol. 14, pp. 542-545, May, '94.

An entertaining discussion holding that public sentiment swings like a pendulum and in swinging away from examinations has swung too far—and concluding:

"It is probable that the ultimate test of acquaintance with a subject should be a combination of the results of the daily record and the final examination, some moderate fraction of the latter—from one-fifth to one-third, varying perhaps, according to circumstances—to four-fifths to two-thirds of the former."

31. The Use and Control of Examinations, by Arthur T. Hadley, N. E. A., 1901, pp. 240-250. Ed. Rev., Vol. 21, pp. 286-300, Mch., 1900.

An address delivered before the Department of Superintendence of the N. E. A.—at Chicago, February 27, 1901.

A frank recognition of the evils of the examination system; a brief consideration of the objections to the certificate system, and a suggestion of a combination of the two with other aids. He divides the studies into three classes.

(1) Subjects which are required because the student must know them in order to have the power to go on with his subsequent studies (*e. g.*, Mathematics): *College Examinations* insisted on. He says:

“The system of accepting certified note books to supplement and correct the results of examinations is essentially a compromise. It has at once the merits and defects which are incident to a compromise system. It is, I believe, used with good effect at Harvard in some of the subjects which are required in the entrance examinations. But the arguments which can be urged in its behalf can for the most part be urged even more strongly in favor of a certificate system as a whole.”

(2) Those required because the college authorities believe them to be desirable means of attaining such power (*e. g.*, required work in Literature): *Recommends examinations*. Whether certificates should be accepted *by common board*;—decision reserved.

(3) Those required because the men in the secondary schools desire them and ask the moral support of the colleges in promoting their study (*e. g.*, History):

“In the third group of studies the certificate system could be used from the outset.”

President Hadley concluded by urging a reform of secondary education by “the separation of our classes, both in the grammar schools and in the high schools, into groups (of pupils) that are about to finish their school days, and groups that are preparing to advance further.”

NEW METHODS OF ADMISSION TO HARVARD.*

During the academic year now drawing to a close, the Faculty of Arts and Sciences have made some notable changes in regard to the admission of students. What those changes are, and what they mean, it is the purpose of this article to set forth, that Harvard graduates, now, perhaps, out of touch with the University, may know that Harvard is still working to bring out of the chaotic conditions of school and college work a simple order that makes for the greatest freedom of opportunity for individuals. Ever since the beginning of the 19th century, Harvard has led the way in regard to admission requirements, changing them from time to time with a twofold object in view — (1) to make them correspond to the increasing variety and thoroughness of instruction given in the schools on which the College rests, and (2) to bring the advantages of a college education within the reach of more and more young men whom previous admission requirements, based on at least a preponderance of classical studies, excluded. In 1871, 1878, 1887, and 1898, the admission requirements were changed in order to adjust them better to school work, and now again, in 1906, the Faculty, still trying to secure methods of regulating admission which shall give the greatest amount of freedom of opportunity to individuals as to choice of studies, together with high standards in the studies themselves, have made changes intended to secure (1) a more just and equable administration of regulations for admission, (2) a wider extension of the benefits of the University, and (3) better methods of testing fitness for admission, which not only shall be fairer as tests, but also shall encourage better scholarship in the work done in preparation for college.

At the beginning of the year, the attention of the Faculty was called to the fact that the methods in use for administering the admission of students were ill-adjusted to new conditions created by the admission requirements of 1898, and by the increase in the number of students applying for admission to advanced standing and as Special Students. Insensibly, with the increasing complexity of college business, a condition

* Reprinted from the Harvard Graduates' Magazine for June, 1906.

of things had grown up which needed readjustment. Owing to the fact that the College must depend mainly, for administrative work, on committees made up of men whose business is teaching special subjects, and who take as extra burdens administrative work, reform in such matters as methods of admission has always been slow. There is usually no one charged with the conduct of such matters who has sufficient time, or the right sort of training and opportunities, to study the needs of the various situations that arise. It is now generally recognized that an elderly clergyman, with the ability to teach Hebrew, may not be the best kind of person to be president of a college; but the minor administrative offices, in most colleges, are filled by weary teachers, whose interests are elsewhere. At Harvard, it was not readily perceived where reforms were needed in methods of admission, because such matters were in charge of no less than five committees, who acted independently of each other. There was one committee to admit Freshmen by examination to Harvard College, another committee to admit students from other colleges, another to admit Special Students, and there were two other committees to admit different classifications of students to registration in the Scientific School.

The disadvantages of this arrangement arose from the fact that all these committees admitted students to the same courses of instruction. Had they represented departments of the University as distinct from each other as the Law School and the Medical School, no difficulties probably would have arisen; but whether a man applied for admission as a Freshman in Harvard College, or a First Year student in the Scientific School, or as a Special Student in either group, he might be asking for admission to the same courses of instruction, taught by the same teachers. These five committees practically admitted students to one and the same instruction. So long as the great majority of students were admitted by the committee which had charge of examinations for admission to the Freshman Class in Harvard College, the arrangement worked fairly well; but with the growth in the number of men admitted by the other committees it became more and more apparent that the actions of the different committees were inconsistent with each other, and that their rulings in cases practically identical were various and conflicting. It was inevitable that five different committees, working separately, should have different theories about admission, and that the administration of admission as a whole should not be equable.

As soon as the Faculty realized clearly that their machinery for admission was out of date, they sought a remedy in the abolition of the five committees, and the substitution for them of one committee, charged with the business of admitting all undergraduates and Special Students.

Hereafter, then, any student not a graduate of another college, who seeks admission to Harvard, must satisfy this one committee that he is qualified by his previous studies to enter the University. One result of the former arrangement had been various standards of admission, so that this or that committee, more easy to satisfy than the others, was known as a "back door." There will be but one door now, and that will be at the front of the house. At that door, the Committee on Admission will welcome any student of serious character and purpose who is qualified by previous training to undertake the work of the courses of instruction to which he asks admission.

The creation of this single committee to administer the large and various business of admission means more than the transference of a great mass of administrative work from five sets of men to one set; and it means, too, more than the equable administration of admission, which is made possible by one committee instead of five. It means that greater progress towards the right solution of the pressing question of admission requirements is possible. Progress was slow and difficult before because no one committee understood the whole field of work; and no one committee could act for all students. Now, a single committee commands the whole situation, and is in a position to study and devise methods of admission which shall be well adjusted to the changing conditions of school and college work. Already, though much remains to be done, something has been accomplished. The Faculty have taken, this year, steps towards improvement in methods of admission in those three directions in which improvement is most needed, not so far as Harvard is concerned alone, but as regards colleges in general. These three directions are (1) a better adjustment of college requirements to school work, (2) a greater degree of uniformity in college requirements, (3) better means of testing fitness for admission.

With respect to the first, some progress has been made towards a better adjustment of admission requirements to the work that precedes, and the work that follows, entrance to college by the establishment of the new degree of S.B. in Harvard College. Many of the difficulties in regard to admission to college are due to the fact that whereas the programs of both schools and colleges have been greatly broadened, admission requirements have not kept pace with that broadening. The requirements have remained a narrow gate between two constantly widening fields of work. Colleges have constantly increased the range and variety of the instruction they give, but have continued to insist on certain traditional studies for admission. High schools have also been forced by public opinion to increase the variety of instruction they give, and have thus been caught between two kinds of pressure, the pressure of public

opinion, which has forced them to teach a greater number of subjects, and the pressure of college requirements, which has forced them to teach the old subjects better ; for college requirements in separate studies have tended to increase in amount. The way out of this difficulty is to make college requirements more flexible by recognizing as admission subjects new subjects taught in both high schools and colleges. The establishment of the new degree of S.B. in Harvard College is one of the many steps which Harvard has taken in this direction, for the admission requirements for this degree include a number of subjects not recognized as admission subjects for the degree of A.B. Formerly, a candidate for the degree of S.B. was admitted only to the Scientific School, in which he was obliged to adapt himself to one of several programs of professional studies, which might, or might not, be adapted to him. Now, he may register in Harvard College, where the more liberal tradition prevails of freedom in election of studies ; and he may direct his work to his own individual advantage. This step brings high school and college somewhat nearer together, and will help towards abolishing the vicious distinction made in high schools between those two sets of young men who, to use the misleading phrases often used to designate them, are "preparing for college" and "preparing for life." That there should be people who believe that a boy preparing for college is not also preparing for life is due to narrow methods of administering admission to college. The passage from high school to college should be as natural as the passage from grammar school to high school ; and admission requirements should be so ordered that every young man may continue, in the larger and fuller life of the university, studies which he has carried as far as the high school can take him, and which he has undertaken as a preparation for the life which he, as an individual, intends to lead. The changes made by Harvard this year, by which candidates for the degree of S.B. are admitted to Harvard College, will tend to encourage young men who intend to enter scientific professions to obtain a liberal education before entering upon training that is strictly professional.

In the second direction — greater uniformity in college requirements — progress also has been made. The variety of college requirements is a source of great embarrassment to the work of schools. In a large school, there may be groups of men preparing for a dozen or fifteen colleges ; and for each group the school must vary its instruction. This is an absurd condition of things ; but it has been somewhat relieved in recent years by the establishment of the College Entrance Examination Board. This Board conducts examinations which are accepted by colleges as substitutes for their own. Up to this year the Faculty have hesitated to accept the Board examinations through fear of endangering the high

standard of the Harvard examinations. The Faculty may be pardoned, perhaps, for believing that their own examinations are better than any others that can be devised, but an insistence upon those examinations as the only tests for admission embarrassed the work of those schools which were obliged to prepare boys for other colleges as well as for Harvard, and discouraged many schools from attempting to send boys to Harvard at all. Young men who lived at a great distance from the University, in cities in which Harvard examinations were not held, had just as good a training for college as young men in Boston, perhaps better, but until this year such young men were effectually discouraged from coming to Cambridge, not because they did not know enough to enter college, but simply because they had not access to any tests which the College would recognize. A boy in a Western city in which Harvard examinations are not held, knows as much, whether he takes Harvard or Board examinations. We may be surer of his knowledge of specific subjects if he passes the Harvard tests; but it is idle to say that the question of his fitness for admission to college cannot be decided by the tests furnished by the Board. Feeling that a state of things was not reasonable which prevented a young man from coming to Harvard, not because he did not know enough, but because he had no opportunity of showing his knowledge in a peculiar way, the Faculty joined the Board, and adopted certain Board examinations as substitutes for their own. By this change, the work of those schools which send boys to Harvard is simplified; and new avenues of approach to the University have opened. The examinations last year were held in about 50 places; this year they will be held in about 150.

In the third respect—namely, better means of testing fitness for admission—steps have been made in advance by the adoption of new regulations which give the schools entire freedom in regard to the ways in which they prepare boys for the admission examinations. The present admission requirements date from 1898, when the Faculty added a number of new subjects to the list of those which may be used for admission. In adopting these requirements, the Faculty did not perceive that they should also change the rules governing admission examinations. A larger number of examinations continued to be administered under rules adapted to a smaller number. By the beginning of this year, the Faculty had had enough experience with the new requirements for admission to see that the rules under which examinations were administered produced certain definite evils. Correspondence with schools showed that the programs of boys preparing for college were crowded in the last two years, on account of the rule that a candidate could not divide his examinations except between two years. Boys were compelled to carry, for examin-

ation purposes only, a larger number of subjects in these two years than they could do well; and progress in individual subjects was checked by the necessity of constant review for examinations in subjects already completed. It was perceived also that the rule which denied a candidate credit for one subject in which he had done good work, because he had not done a number of other subjects also, checked a boy's natural intellectual growth. Such a rule created an absurd situation, in which boys who passed, let us say, an examination in Chemistry, with Grade A, were refused any credit whatever for having done so, and were compelled to take another examination a year later in the same subject. Perceiving these difficulties, the Faculty readjusted the rules governing admission examinations to the changed conditions. Hereafter, the proper distinction will be made between giving credit for individual subjects and giving permission to enter the University. Candidates will be free to show that they have the required knowledge of Algebra, History, etc., whenever they have completed their work in those subjects; and the question of their fitness for admission to the University will be passed upon by the Committee on Admission when they have completed their records. Admission will no longer be a matter of passing so many examinations in one year, and so many the next year, but a matter of offering a body of work corresponding to the admission requirements which the Committee on Admission will consider with respect both to quantity and to quality.

Enough has been said, perhaps, to show that in this matter of admission requirements and administration the University is true to her traditional regard for the individual; and that she has this year taken several steps which make for increased freedom of opportunity. Harvard always has been the most democratic of American institutions of learning; and the changes made this year will tend to make her more democratic. By reason of inelastic admission requirements, colleges have not been as useful as they should be. While constantly extending the number of subjects in which they themselves give instruction, they have maintained admission requirements which have tended to restrain high schools from proceeding in the same liberal manner. In recognizing all the subjects commonly taught in high schools as suitable subjects in which to examine for admission, by not insisting on peculiar tests of fitness, but by accepting such more widely established tests as those of the College Entrance Examination Board, and by giving to the schools a reasonable freedom in regard to the methods by which they prepare boys for admission, Harvard has done much to lessen the unfortunate separation between high schools and the college, to simplify the work of schools, and to make the resources of the University more easily accessible to a much larger number of men. Moreover, the changes in the College machinery will,

it is to be hoped, hasten the solution of the many problems connected with the admission of students to the numerous departments of instruction, some of which are now almost as large as the old College used to be. The new Committee on Admission is in a better position than any committee heretofore to study the situation, and to devise remedies where they are needed. They can do the University a great service if they look upon their work, not as the work of keeping out men who have not been trained in peculiar ways, but as a work of keeping methods of admission constantly adjusted to changing conditions in school and college, so that men shall be selected for the College by natural, and not by artificial, methods. Rightly managed, the work of such a committee should encourage every boy, whether his mind is one that grows by contact with Greek and Latin, or by contact with Engineering, or with any other subject in which the University gives instruction, to make the University his goal.

J. G. Hart, '93.

APPENDIX IV.

SEPARATE REPORT BY PROFESSOR ALBERT BUSHNELL HART,
'80.

Professor Hart writes:

May 21, 1906.

"The carbon copy of the report of the Committee on the relation of Harvard University to secondary education reached me this morning, and I have gone over it thoughtfully. I telegraphed you that I hesitated to sign it. My individual judgment would be that the Committee had better make a preliminary report on the effect of the recent changes in bringing Harvard into closer relations with the fitting schools, and perhaps should make some recommendation in regard to examination scholarships, and then should ask for continuation in order to report on the question of certification.

The reason for this opinion is first of all that returns from forty-one schools are a narrow basis for generalizations as to over six hundred schools, which have sent boys to Harvard College during the past ten years; and we really have not data to establish conclusions which will be important and convincing. In the second place, the report bears very strongly in favor of certification and a system of examination of schools by Harvard authorities, and there are several considerations which would need to be examined before a helpful deduction could be made on that subject; for instance, certification may be one thing, when there are several powerful institutions, including Harvard and Yale, which stiffen up the whole standard by their examinations, and which give a point of comparison. The question of the number of students who are turned back in the Freshman year after certification, as compared with those who fail to justify their examinations, is also a very important factor, which

there has been no opportunity to discuss. In the *Educational Review* for May, 1906, there is a vigorous, and I believe wrong-headed article, on Examinations and the Results in Columbia, by Edward L. Thorndike, which nevertheless presents considerations which ought to be taken into account by our Committee.

At the very outset of the report, you discuss the coming in of men from other colleges, registered as undergraduates, and quite leave out of account the fact that probably the greater number of these men got their degree from their own colleges, and then came to Harvard to get a second A. B. Probably you are acquainted with students who have thus a double but not a divided loyalty.

The conditions with regard to certification of a state university like Michigan, Wisconsin or California, which deals almost entirely with public high schools, the principals and many of the teachers of which are graduates from the university in question, is a very different matter from certification in a state like Ohio, where there are many colleges. and where there is no very close relation between the schools and the state university; and still more different where there are the great endowed academies and private schools.

I have thought that a report on the question of certification would have pith and weight, provided we were able to go into it further, and provided we examine the question why the system of inspection organized about fifteen years ago by Harvard was a total failure. The report says that 'the value of Harvard's approval to the secondary schools will be such as to make all schools seek it,' but the experiment, based on very carefully prepared plans, proved that almost no schools desired a Harvard approval.

There are also some very important questions within the main field of the committee's deliberations, which could be solved, but which we have not yet reached. For instance, the question of the number of Harvard graduates engaged as teachers in

schools of various types, which of course would throw a good deal of light on the directing of boys to college; this ought to include the influence of Radcliffe graduates as teachers and the teachers trained in the summer schools.

I do not at all underrate the labors of the Committee, or rather of its Chairman, who has turned on so much steam in the inquiry, but the subject of examination and certification is too serious to be disposed of without going considerably deeper into it. I am entirely open to conviction, but my present frame of mind is that it is impossible for Harvard College to inspect any considerable number of its large area of feeders; and, without inspection, certification is delusive. So far as I can see, the only subject on which we could make a report at this time which would influence, would be the effect of the new organization for admission to college, in the way of simplifying the process, which would be sent out as a matter of information and suggestion to the members of the Associated Harvard Clubs for themselves, their sons and for the schools in their neighborhoods; it is very important that this change of attitude should be spread abroad. Perhaps a second point might be scholarships to be given as prizes on examination. I suppose the great difficulty there is that you cannot offer a prize where there is only a small number of candidates; and if the whole thing is thrown open to a general competition, the prizes are pretty sure to go to boys from the most experienced Harvard schools in the East. As a matter of fact, the present assignment of the Price-Greenleaf Aid resembles admission on certificate, in that it is given on the credentials furnished by the teachers in the boy's school and other persons who can testify to his ability, subject to withdrawal, if the examinations do not confirm the favorable opinion.

The office has sent all the materials they have with reference to the new system of examination, so that any part of it that you think fit may be used, or you might summarize it. The main points to bring out are:

1. The question whether the student can be received on some other conditions than that of entrance by examination into the Freshman class is determined by the same Committee which settles the question of Freshman admission; and this is especially convenient to boys not qualified to enter a college as Freshmen, who nevertheless may profit by a status as special students.

2. Examinations on the installment plan may be taken in any June or September, on subjects to which the teacher certifies the candidate is fitted; this gives the teachers a new responsibility and secures many of the benefits of the certificate system. The boy will get credit for what he passes.

3. In addition, just as heretofore, any candidate who wishes to try his fortune on a sufficient number of subjects to admit him if he passes them may take examinations either in June or in September without the teacher's certificate, if he has completed his school course and has been honorably dismissed.

4. The certificate is not necessarily that of a school; a tutor, or, I take it, any person who has superintended or followed the self-preparation of a boy, will be accepted as sufficient to enable him to take installment examinations.

5. Although to obtain a status leading ultimately to the A. B., a candidate for Harvard College must pass in twenty-six points, he is in practice usually admitted with *conditions on twenty points* to the College and *eighteen* to the Scientific School, whether those points are accumulated by successive installments or are gained by taking the examinations all at once.

6. The policy of the Faculty in establishing this concentrated system of admission to all its departments is based upon a purpose to get rid of technicalities, and to come down to the fundamental question whether a student is prepared to profit by the instruction of the Freshman year.

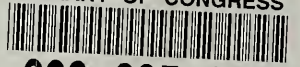
7. The Secretary of the Faculty, Mr. J. G. Hart, is Chairman of the Committee and has charge of the entrance system, and will answer all inquiries promptly and specifically.

I regret that I cannot coincide with the whole report, but I feel very strongly that we could render a much greater service by taking another year and going more thoroughly into the whole question. The work of the Appointments Bureau in placing Harvard men in the secondary schools; the actual number of Harvard men thus engaged; the proportion of Harvard students coming from the New England academies, from the high schools and the private schools; the question of how far school relations proceed after entrance into college; these and many like subjects are extremely pertinent, and though some of them do not lend themselves to statistical treatment, are such as can be properly treated in a later report.

Furthermore, so far as I yet have light, I think that the maintenance of an examination system is a very much better thing for Harvard and for the country than any certificate system could be."

ALBERT BUSHNELL HART.

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